

Psychology of *Fifth Edition* Adolescence

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IN ASSOCIATION WITH

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To the Memory of a Great Teacher

ROBERT H. LOWIE

Preface

As in previous editions, I have tried in this one to present a comprehensive, balanced picture of adolescent growth along all lines—physical, intellectual, emotional, social, and moral. Naturally, the published reports of research in these various phases of adolescent development are not equal in number, scope, or value, but within the limits imposed by the available studies, I have given equal emphasis to developments in each field.

As in the earlier editions, I have used many case histories, anecdotes, personal reminiscences, figures, pictures, and other illustrative materials, not only to make the text of greater interest to the student but also to clothe the facts with living flesh and blood, so that the reader may see how the various phases discussed in the abstract appear in human development.

In this edition I have added one chapter, have subdivided all the long chapters in previous editions, and have made a new arrangement of the units. Part One includes a single short chapter on the goals of adolescence. Parts Two through Five present materials on physical, intellectual, emotional, social, and moral growth, respectively. Part Six contains a series of chapters that relate specifically to the application of facts and theories to the business of teaching. Previously, these chapters were scattered throughout the text. The last section, Seven, has only one chapter, which deals with the end of adolescence and the beginning of adulthood. There is, thus, first a presentation of all phases of adolescent development, followed by an application of them to the schoolroom.

The booklist of fiction and biography has been revised with the help of an omnivorous reader, and a list of films has been added to it (Appendix A). The Problems and Projects have also been revised (Appendix B).

In general I have done my best to bring the text up-to-date, but, like any writer on the subject, I have found the literature so extensive that one could not read it all and still have time to write a book before one's reading had become outdated by the next onrush of reports. I have been forced, therefore, to select what seemed to me a fair representation of the most

promising studies. The resulting text, I believe, will give a sound, modern view of adolescence, but it is in no sense a compendium.

In preparing this edition I have had the invaluable assistance of Irma Nelson Hall, who has done most of the reading and who has written some entire chapters. Aside from her competence and her cooperative spirit, Mrs. Hall has brought two significant attributes to this edition: she is enough younger than I to be considerably closer to today's adolescents, and her training has been in the modern schools of thought. I have also had a number of helpful suggestions from Professor Albert H. Hastorf, Chairman of the Department of Psychology at Dartmouth College, and from Dr. George Dolger, a consulting psychologist formerly associated with Upsala College.

I trust that the modernizing and organizational changes in this edition have produced a text that will be of value to those who deal with adolescent boys and girls.

LUELLA COLE

Berkeley, California
March, 1959

I shall be glad to answer inquiries about points raised in the book. These should be addressed to me in care of Rinehart & Company, Inc., 232 Madison Avenue, New York 16, N.Y.

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Introduction

1

The Goals of Adolescence

In a discussion of adolescence as a period in human growth, perhaps the first point to establish is the difference between adolescence and puberty. The latter refers to the relatively brief period of physiological change during which the sexual organs become mature. For girls this period is hardly more than six months in length, but for boys it may last two years, or even longer. Puberty supplies the basis for adolescence but is by no means synonymous with it. The two periods begin at much the same time, but adolescence lasts for about eight years and involves not only the pubertal changes in the body but also developments in intellectual capacities, interests, attitudes, personal relationships, emotional growth, vocational and academic interests, aptitudes, and religious and moral developments.

Almost all primitive groups that have been studied have had some kind of puberty rites—sometimes for boys, sometimes for girls, sometimes for both. These ceremonials gave public recognition to the physiological changes that permitted the boy to be ranked from then on as a man and the girl as a woman. Both were ready for marriage, which, being largely a matter of arrangements between families rather than between individuals, did not involve judgment or maturity in either partner. Of adolescence, however, one finds hardly a trace. There was no time in primitive economy for a long period of gradual maturing in interests and attitudes. Nor has there ever been time until the present century. Adolescence as a phenomenon among the young of all social classes is thus a product of modern culture and of a civilization that has enough machines for purposes of production to make the labor of young people unnecessary. It is only recently that education has been prolonged and marriage postponed until a true period of adolescence has become an almost universal phenomenon in the Western world.

In order to trace the manifold changes during adolescence it is sometimes desirable to compare the period with childhood or maturity. It seems, therefore, a good idea to delimit the various levels of growth that will often be referred to later on. The modern psychologist has broken down the stages of growth into relatively small units and has studied each more or

less intensively—infancy and early childhood the most and old age the least, although with the present concentration on geriatrics there should soon be more information about the final period of human existence. The entire range from birth to death may be divided as follows

Infancy	birth to 2 years
Early childhood	2 to 6 years
Middle childhood	6 to 11 years (girls), 6 to 13 years (boys)
Preadolescence or late childhood	11 to 13 years (girls), 13 to 15 years (boys)
Early adolescence	13 to 15 years (girls), 15 to 17 years (boys)
Middle adolescence	15 to 18 years (girls), 17 to 19 years (boys)
Late adolescence	18 to 21 years (girls), 19 to 21 years (boys)
Early adulthood	21 to 35 years
Middle adulthood	35 to 50 years
Late adulthood	50 to 65 years
Early senescence	65 to 75 years
Senescence	75 years, onward

It should be understood clearly that one does not automatically pass from one of these periods to another on a given birthday. One level of development shades gradually into the next, indeed, the earlier stages are so short that each is hardly established before premonitory signs of the following one appear. For the adolescent years, the age limits differ for the two sexes because girls mature on an average two years earlier than boys, who do not catch up with them until the last years of adolescence. It will be noticed that the main divisions of the school system correspond roughly to the developmental levels of the years before adulthood.

Each of the periods has its own problems which must be solved if the individuals are to enter the next period without handicap. Adolescence is perhaps no more important a stage of development than any other, but it is the last stage before adulthood, and it therefore offers to both parents and teachers the last opportunity to educate a child for his adult responsibilities.

Objectives of the Adolescent Period

Near the beginning of the adolescent period the boy or girl achieves sexual maturity and, in some specific capacities, intellectual maturity as well. By the end of adolescence, physical growth is complete and intellectual growth very nearly so. Only severe deprivation can prevent a human organism from reaching adult size, shape, and function, or from growing into its expected mental maturity. In short, Nature will provide for these two

types of growth, unless some catastrophe intervenes. The real problems of adolescence are therefore emotional, social, moral, and economic.

Most adolescents solve their problems by slow degrees during the ages from twelve to twenty-one. The adolescent with severe conflicts and violent reactions is so much more dramatic than the boy or girl who develops slowly, and without fireworks, that one is likely to overemphasize the storm and stress of the period. In the normal growth of a typical individual, childhood fades, adolescence advances, and adulthood arrives in a gradual, smooth series of small changes and with only temporary and incidental difficulties and disturbances.

The boy or girl enters adolescence with a child's adjustment to the world. No matter how perfect his emotional and social adaptation may be, it is not suitable for adult life. A child is normally dependent upon others, has little or no interest in members of the opposite sex, expects to be supported both emotionally and financially by his family, takes his judgments ready-made from those he admires, and has neither the interest nor the ability to deal with generalized principles. At the end of his adolescence he should be ready to leave his home—emotionally and actually—to maintain himself economically, to manage his own social contacts, to make up his own mind, to establish his own home, and to concern himself with the general principles behind surface phenomena.

In the change from dependent childhood to independent adulthood an individual has to approach many goals, the more important of which are to be presented shortly. These objectives have been grouped for the sake of convenience into nine areas of human interest and activity: emotional maturity, establishment of heterosexual interests, social maturity, emancipation from home, mental maturity, the beginnings of financial independence, proper uses of leisure, the development of a definite point of view about life, and the identification of one's self. These are the same objectives that hold for the years of maturity also; the adolescent can be expected to make only a beginning in leaving his childhood behind him and in preparing to enter adulthood. It is a rare person who achieves adulthood in all phases of existence. The child that one once was keeps popping up from time to time with childish, if not infantile, solutions to the myriad problems of daily life. From that child no one ever fully escapes, but the adolescent should make a beginning in the process of meeting the new requirements of adulthood. In order to emphasize the basic fact of growth, the goals—presented in the next few pages—have been stated in terms of change from a childish toward an adult level.

The first set of problems and goals centers around the attainment of emotional control. Children have little power to inhibit their responses, they have many fears, they are self-centered, and they run away from what is disagreeable. It is, then, one task of adolescence to emerge from childish

into adult forms of emotional expression, to substitute intellectual for emotional reactions, at least in recurring situations, and to learn that one cannot escape reality

Table 1 GOALS OF THE ADOLESCENT PERIOD

A *General Emotional Maturity*

From	<ol style="list-style-type: none"> 1 Destructive expressions of emotion 2 Subjective interpretation of situations 3 Childish fears and motives 4 Habits of escaping from conflicts 	toward	<ol style="list-style-type: none"> 1 Harmless or constructive expressions 2 Objective interpretations of situations 3 Adult stimuli to emotions 4 Habits of facing and solving conflicts
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B *Establishment of Heterosexual Interests*

From	<ol style="list-style-type: none"> 1 Exclusive interest in members of same sex 2 Experience with many possible mates 3 Acute awareness of sexual development 	toward	<ol style="list-style-type: none"> 1 Normal interest in members of opposite sex 2 Selection of one mate 3 Casual acceptance of sexual maturity
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C *General Social Maturity*

From	<ol style="list-style-type: none"> 1 Feelings of uncertainty of acceptance by peers 2 Social awkwardness 3 Social intolerance 4 Slavish imitation of peers 	toward	<ol style="list-style-type: none"> 1 Feelings of secure acceptance by peers 2 Social poise 3 Social tolerance 4 Freedom from slavish imitation
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D *Emancipation from Home Control*

From	<ol style="list-style-type: none"> 1 Close parental control 2 Reliance upon parents for security 3 Identification with parents as models 	toward	<ol style="list-style-type: none"> 1 Self-control 2 Reliance upon self for security 3 Attitude toward parents as friends
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E *Intellectual Maturity*

From	<ol style="list-style-type: none"> 1 Blind acceptance of truth on the basis of authority 2 Desire for facts 3 Many temporary interests 	toward	<ol style="list-style-type: none"> 1 Demand for evidence before acceptance 2 Desire for explanations of facts 3 Few, stable interests
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F *Selection of an Occupation*

From	<ol style="list-style-type: none"> 1 Interest in glamorous occupations 2 Interest in many occupations 3 Over- or under-estimation of one's own abilities 4 Irrelevance of interests to abilities 	toward	<ol style="list-style-type: none"> 1. Interest in practicable occupations 2 Interest in one occupation 3 Reasonably accurate estimate of one's own abilities 4 Reconciliation of interest and abilities
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Table 1 (*Continued*)*G Uses of Leisure*

From	<ol style="list-style-type: none"> 1 Interest in vigorous, unorganized games 2 Interest in individual prowess 3 Participation in games 4 Interest in many hobbies 5 Membership in many clubs 	toward	<ol style="list-style-type: none"> 1 Interest in team games and intellectual contests 2 Interest in success of team 3 Spectator interest in games 4 Interest in one or two hobbies 5 Membership in few clubs
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H Philosophy of Life

From	<ol style="list-style-type: none"> 1 Indifference toward general principles 2 Behavior dependent upon specific, learned habits 3 Behavior based upon gaining pleasure and avoiding pain 	toward	<ol style="list-style-type: none"> 1 Interest in and understanding of general principles 2 Behavior guided by moral principles 3 Behavior based upon conscience and duty
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I Identification of Self

From	<ol style="list-style-type: none"> 1 Little or no perception of self 2 Little idea of other people's perception of self 3 Identification of self with impossible goals 	toward	<ol style="list-style-type: none"> 1 Moderately accurate perception of self 2 Good idea of other people's perception of self 3 Identification of self with possible goals
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The second set of problems centers around the attainment of adult attitudes toward sex. The centering of one's emotional attention upon members of one's own sex or upon older people is a typically childish reaction. Neither of these love interests is an adequate cornerstone for an adult adjustment. The pubertal changes usually arouse a great interest in sex, which may find expression in an exaggerated awareness of one's own bodily development or that of other people. During the period both boys and girls do a great deal of experimenting in emotional—not necessarily sexual—relationships. The interest of a boy in *all* girls merely because they are girls, and of a girl in *all* boys merely because they are boys, is strong in early adolescence but should disappear by the end of the period. It should be replaced by a concentration upon a single person as a mate. The adolescent has, then, to develop first an acute interest in possible future mates and then to recover from the incidental effects of this acute interest. During the years when these changes are in progress, a boy or girl gets into more or less serious difficulties, but no trouble can possibly be as serious as the failure of the normal developments to take place.

A third group of problems concerns general social maturity. Until boys and girls establish themselves securely in their social milieu they have little attention for other problems. Adolescent boys and girls tend to show a slavish dependence upon and imitation of their friends. This attitude is

definitely helpful during the years it should last, but its continuance makes adult life unduly difficult. Many adolescents are also intolerant—a trait that marks them off from both the child and the adult. The child has the tolerance of ignorance and insensitivity to social stimuli, while the true adult has the tolerance of knowledge and understanding.

A fourth set of problems clusters about the establishment of independence from home supervision. Emancipation from home ties is necessary because the adolescent will never become a real adult as long as his parents make his decisions for him, protect him from unpleasantness, and plan his daily life. In most homes the children grow gradually away from the parents, but in some they are either pushed out too fast or kept under restraint too long.

In the intellectual field there are certain objectives to be achieved. Some individuals never develop sufficient mental ability to reach these objectives, but the majority of adolescents could, with training, make more progress toward them than they sometimes do. As people grow older they should become more and more unwilling to accept statements on the basis of authority alone and should want to see the evidence. They want also to know why things are as they are. In early adolescence many interests arise, too many for all of them to continue, later on, there is commonly a narrowing of interests to a few that become permanent. Persistence of intellectual dependence upon authority or of too widely scattered interests is an indication that adolescence has not yet been left behind.

No one is truly an adult until he earns his own living. One set of problems therefore concerns the development of economic adulthood. A child concerns himself only incidentally and quite unrealistically with future occupations, an adolescent tends to overemphasize glamour and to suppose that interest is all one needs for success, an adult has reached a compromise based upon his abilities, his interests, and his opportunities.

In the world of today people have more leisure than they ever had before. It is only recently that educators have realized how necessary it is for an adolescent to learn how to make wise use of his leisure time. One of the important contributions of the high school's extracurricular program to adolescent adjustment lies in its training for the use of leisure. Games and hobbies contribute greatly to the enjoyment of life, but if they demand too much time, energy, or money, the adult has to forsake them. As boys and girls grow older they develop a spectator interest in the more active games, and they begin to substitute the less strenuous amusements of adult life for the rough-and-tumble of childhood.

An adolescent should make a beginning in the development of a point of view concerning the world about him. Sometimes such an integrating attitude toward life has its basis in religion, and sometimes not. Children have neither the intellectual capacity nor the experience in living to make

sound abstractions and are therefore unable to develop ideals. The adolescent, however, is almost certain to adopt general principles of conduct, whether or not these principles lead to socially approved behavior. Naturally, it is only the most precocious of adolescents who enter adulthood with a coherent philosophy of life or with a complete set of ideals. A beginning is all one can expect, but as an adolescent nears adulthood he should start to select whatever values he can find to give life a meaning for him.

Finally, during the period of adolescence the boy or girl begins to find out what kind of person he or she is, to see the self with some degree of realism, and to sense what other people think. This process of finding out "who you are" goes on throughout life, but it has its beginnings in the years between childhood and adulthood.

Summary

In modern society a long period of adolescence has replaced the short period of puberty that was recognized as important from early times. Just as primitive peoples utilized the few months of puberty as a period for special preparation of boys and girls for their future participation in the life of the tribe, so modern educators want to utilize the longer period of adolescence for special preparation in meeting the manifold problems of present-day society.

In order to pass from childhood to adulthood the adolescent must solve a number of problems. He must develop heterosexual interests, become free from home supervision, make new emotional and social adjustments to reality, begin to evolve a philosophy of life, achieve economic and intellectual independence, and learn how to use his leisure time profitably. If he fails in any of these achievements, he fails to gain full maturity. To put the matter in a nutshell, the main business of the adolescent is to stop being one!

References for Further Reading

This text contains five sets of references or other additional materials. There are (1) those in the footnotes, which indicate the source of a table, figure, or statement. At the end of each chapter there is (2) a list of references, divided into two main groups. The first group contains only books—whenever possible, widely used books that should be available even in small libraries. A student would rarely be expected to read more than one of the book references. Some of the assignments cover specific chapters that roughly parallel those of the present text, other references are to books in which some matter treated briefly in the text is presented at greater length. The second group includes titles from monographs, proceedings,

reports, yearbooks, and articles in periodicals, each giving results from a definite piece of research. These lists are not to be regarded as adequate bibliographies but only as springboards from which a student may get started. The full bibliographical citation appears the first time a reference is quoted, but not subsequently.

In addition to the readings for each chapter, there is (3) a list of novels in the Appendix. Each novel exemplifies at least one problem of adolescence. Some books carry a single group of characters from birth or early childhood into adult years, others describe a cross section of life during adolescence, still others show how environment may influence growth, some are primarily about adults whose behavior is explained in terms of their personal history, a few deal with abnormal developments. The course will provide a better understanding if each student reads at least three novels, and then writes, instead of a summary of its plot, a brief statement concerning the problems of adolescence illustrated by each novel. The fourth (4) consists of a list of motion pictures that deal with different phases of adolescence. The list is not long but has been selected with care so as to contain films that will throw as much light as possible upon typical problems of adolescence. Even from commercial sources the cost of such materials is not high, and some of them are distributed gratis. On the last few pages of the book, immediately in front of the index, the student will find (5) a list of problems and projects grouped by chapter. Many different topics have been included, in the hope that each student may find at least one that will intrigue him.

References for Further Reading

(Please note that publishing information is given only with the first appearance of each text in the References. In later References only author and title are given.)

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Other Texts

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- Malm, M, and O G Jamison *Adolescence* New York McGraw-Hill Book Company, 1952, 512 pp (Chap 1)
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PART ONE

Physical Development

2

Growth in Tissue, Muscle, and Bone

Adolescence is fundamentally a period of physical and physiological change. This growth furnishes the physical basis for emotional, social, intellectual, and economic maturity. If a child did not increase his stature, if his muscles did not become strong, if his sex organs did not grow, if his brain did not mature, if his internal organs did not increase in size and efficiency to meet the requirements of an enlarged body, the child could never achieve mature ideas and attitudes, could never support himself, and could never take his place in adult society. Because of these all-pervasive effects of growth, it seems desirable to begin the survey of adolescence with a fairly detailed picture of the physical manifestations of the period, together with some consideration of what these changes mean to adolescents and of typical responses to them. Teachers need to know the basic facts about growth so that they will not make such an error in judgment as to regard a fast-growing boy as necessarily lazy because he is tired all the time. They need also to remember that their pupils are living, growing, changing, developing organisms.

This and the next three chapters contain material about general size and proportion, growth in the bones, growth in strength and co-ordination, and changes in the internal organs. There follows a short chapter on general health during adolescence and a final one for this section on the problems of those children who deviate in some way from the adolescent physical norm.

Naturally, a child grows in every system of the body simultaneously, but his development in all systems cannot be simultaneously described. One has to begin *somewhere* and proceed from the point of departure by logical steps. Otherwise, the reader would derive more confusion than clarity from the reading. However, the student should never forget that these serially described developments are all taking place at the same time within each child's body. It is therefore essential that a teacher be continually altering and adapting her methods of teaching as the pupils mature. More than one teacher who has taught a childish, slapdash pupil in grade 9 has been

stunned to find a serious, careful, mature student when she taught the same pupil in grade 12. Moreover, mere physical growth has a profound effect upon personality and social adjustments.

Height and Weight

General Curves In the last few decades, growth curves have been based upon measurement of the same children year after year. By this technique one gets a more accurate picture of growth in general and of

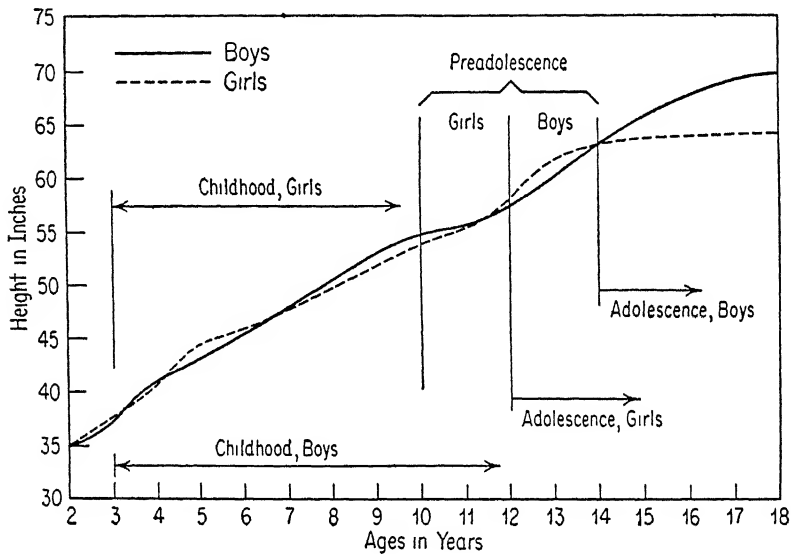


Fig 1. Growth in Height

Based on curves found on p. 203 of R. D. Tuddenham and M. M. Snyder, "The Physical Growth of California Boys and Girls from Birth to Eighteen Years," *University of California Publications in Child Development*, 1: 183-364, 1954.

individual development in particular. Such measurements are often termed "longitudinal." The curves to be given in this and later chapters are based, whenever possible, upon continuous measurement of the same children. Results for boys and girls are given separately in the figures that record growth, because members of the two sexes develop at different rates and in different ways. Since the facts about adolescence should be related to similar data from the preceding years, the curves shown in Figures 1 and 2 show growth in height and weight extending from age 2 to maturity. The various periods have been marked off.

The curve brings out especially the two points that are of importance in conditioning the attitudes of adolescents. In the first place, it is clear

that growth is rapid just before and during early adolescence. Among boys the curves for height and weight rise most sharply from ages 12 to 16, with additional smaller gains until 18. The curves are still rising at 18, though slowly. Among girls, growth is rapid in preadolescence but slower during the adolescent period. A second point concerns the relative growth for the two sexes. In childhood, girls average about two inches shorter and a

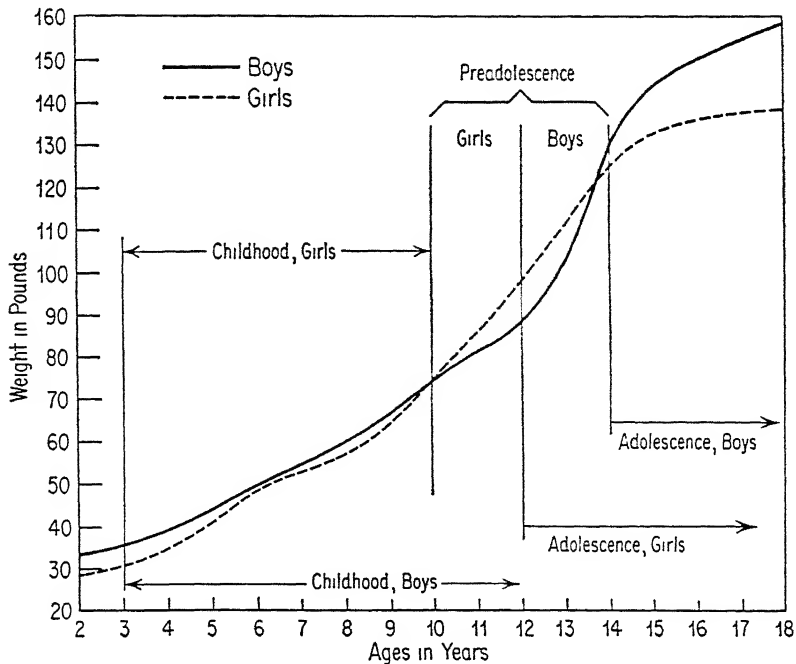


Fig 2. *Increases in Weight*

Based on Tuddenham and Snyder, *loc cit*, p 203.

pound lighter than boys of the same age. However, since girls develop in all respects faster than boys, their preadolescent growth begins sooner. Between the ages of 12 and 13 they average a bit taller than boys, and from 11 to 14 they are about seven pounds heavier. By 18 they have reached their adult size, but boys are still growing. At this time girls average six inches shorter and twenty pounds lighter than boys.

The curves for weight show parallel developments, but the shapes of the curves are different. The curves in Figure 1 are almost straight lines, with a slight tendency to be convex, while those in Figure 2 are concave. In extreme form, the difference is between \smile and \frown . This difference in shape comes from the different rates at which final height and final weight are

acquired Whereas a child has half his eighteen-year-old height by the time it is three years old—or she is two and a half—he does not gain half his eighteen-year-old weight until he is 11 or she is $9\frac{1}{2}$ The growth spurt in weight is considerably more marked than that in height In girls, the onset of puberty has the effect of slowing down the rate of growth By age 14 most of the girls have begun to menstruate, and there is little further rise to the curve Among boys, however, sexual maturity has exactly the opposite effect During pubescence, while boys are acquiring their sexual characteristics, they grow very rapidly, and they are still growing at eighteen, whereas the girls have stopped The differences in the adult height of men and women are probably due to this phenomenon, since the difference during childhood is very slight, and members of both sexes enter their puberty at about the same height and weight

For many boys and girls, the rapid increase in size is somewhat disconcerting A boy may gain as much as 6 inches and 25 pounds in a single year. Such a child starts the year at, say, 112 pounds and ends it at 137, he has progressed in twelve months out of the flyweights, through the bantam and featherweights, and into the lightweights Since most of his increased height is due to growth in his legs, he finds himself equipped with pedal extremities that get him across a room rather faster than he expected, causing him to overrun his objective, they also tend to get tangled in the furniture His arms, having grown 4 or 5 inches in length, also contribute to his miscalculations of distance and lead him into a long series of minor tragedies, from knocking over his waterglass because his hand reached it too soon to throwing a forward pass 6 feet over the receiver's head, because his elongated arm automatically produced far greater leverage than he has been accustomed to. In general, girls do not have so prolonged an "awkward age" as boys, partly because they grow less, partly because they grow more slowly, and partly because they grow sooner However, the tallest and largest of girls have in magnified form the same malco-ordination as any boy. It requires time for both boys and girls to get used to being what seems to them altogether too large

This period coincides with the years of junior high school and the first year of the senior high, for girls, and for boys with the entire four years of high school. Teachers can therefore expect a few episodes that are minor in themselves but may prove horribly embarrassing to the adolescent

Growth Rates in Different Groups The growth curves shown in Figures 1 and 2 give a generalized picture that tends to conceal differences among groups or individuals and to combine the effects of many factors rather than to isolate the effects of each Four influences that hasten or retard growth and have an effect upon final adult height are (1) the age level at which an individual child grows fastest, (2) his nearness to puberty, (3) his remote (racial) and immediate (familial) inheritance, and (4) the envi-

ronment in which he lives, especially his degree of freedom from disease and the adequacy of his diet

1. In general, those whose period of maximal growth comes earliest and those who are going to mature early tend to grow faster than other children. These facts are especially true of boys. Figure 3 shows growth curves in height and weight for three groups of boys—members of one group experi-

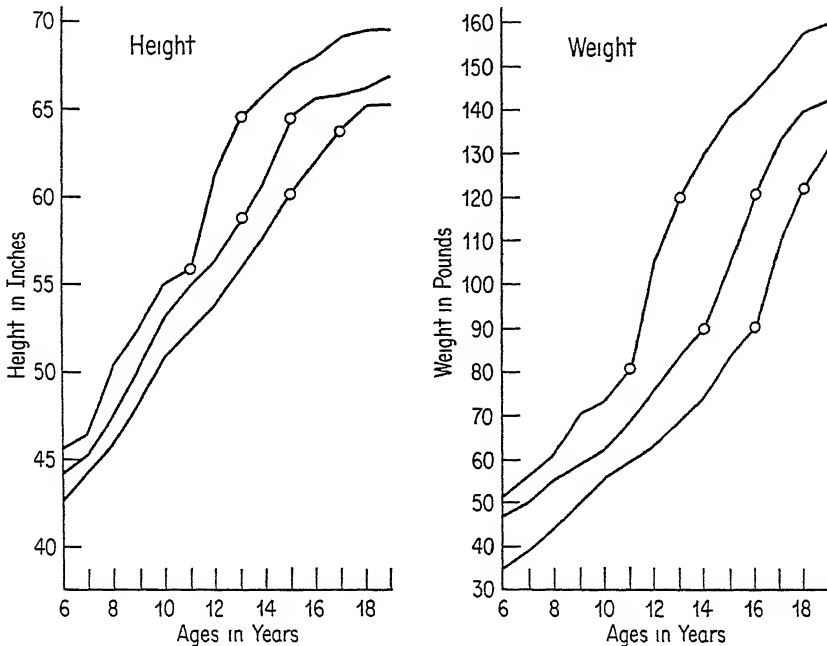


Fig 3 Growth Rates of Boys Having Different Periods of Maximum Growth

Based on F. K. Shuttleworth, "Physical and Mental Growth of Boys and Girls Ages Six through Nineteen in Relation to Age of Maximum Growth," *Monographs of the Society for Research in Child Development* (No. 3), 4: 16, 149, 1939.

enced their period of maximal growth between the ages of eleven and thirteen, the second group made its greatest gains two years later, between thirteen and fifteen, and the third group four years later, between fifteen and seventeen. These periods are indicated on the curves by small circles. It will be seen at once that the three curves for height are all of the same general shape, but that the steepness of the rise depends upon how early a boy passed through the period of most rapid growth. The same is true of the three curves for weight. At age 18 the three groups show a difference of only 4 inches in height and 28 pounds in weight. At age 15, however, the differences are $6\frac{1}{2}$ inches and 57 pounds. Similar results have been obtained from parallel groups of girls.

2. As will become increasingly clear in the following pages, the nearness of a child to his or her maturity exerts an influence upon various phases of growth. Those who are going to mature earliest grow faster from early childhood. The silhouettes in Figures 4 and 5 present typical comparisons

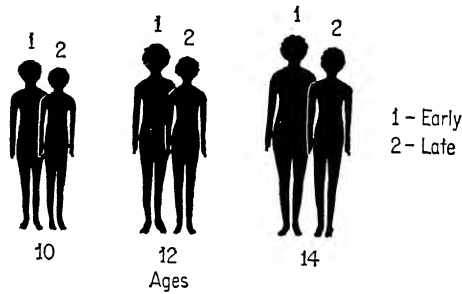


Fig 4 Early- and Late-Maturing Girls

Silhouettes are based upon F. K. Shuttleworth, "The Adolescent Period. A Pictorial Atlas," *Monographs of the Society for Research in Child Development* (No. 50), 14:1, 1949, p. 13.

of pairs of girls at ages 10, 12, and 14, and of boys at ages 11½, 13½, and 15½. In each pair, the child to the left matured early and the one to the right considerably later. Differences in height, weight, and closeness to adult proportions may be noted.

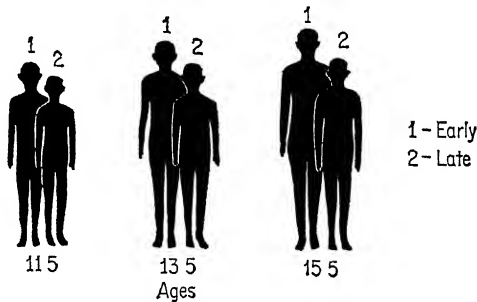


Fig 5 Early- and Late-Maturing Boys

Based on Shuttleworth, "The Adolescent Period," p. 24.

3. Racial and family stock also have an effect upon growth, especially upon the determination of adult stature. Most Oriental groups tend to be short; even those who grow up under the best of conditions are not as tall as the average for members of the white or black races. The tallest and the shortest peoples in the world—the Shilluk of the Upper Nile and the Pygmies of the Congo—both belong to the Negro race, but the former are almost

three feet taller than the latter. The differences cannot be attributed to diet or climate, since both groups have an inadequate diet and live in the tropics. Different groups of the white race show heights varying from that of the taller Negroes to the average for Orientals (when the latter are adequately fed).

Two studies that deal with differences in either growth rate or size at a given age will be presented. The first¹ compared the height and weight of 1,102 American boys of Finnish extraction with those of 884 American boys of Italian extraction. The age range was from 6 to 17. Members of both groups were reasonably well nourished. The differences were relatively small but perfectly consistent at all ages. The boys from Finnish families averaged 1 inch taller and 2½ pounds heavier.

Table 2 AVERAGE HEIGHT AND WEIGHT OF VARIOUS GROUPS OF
TEN YEAR-OLD CHILDREN

	Height in Inches	Weight in Pounds
1 Native children of Okinawa	49.9	54.8
2 Bantu children (Africa)	50.9	54.6
3. Mexican children of lowest classes	51.3	61.2
4 French children in Marseilles	51.5	57.6
5 American-born Chinese	51.6	56.5
6 Pueblo Indians	51.6	58.3
7. American-born Japanese	52.3	62.5
8 Los Angeles Mexicans	53.5	66.2
9 Poorest class, urban, North American whites	53.7	64.0
10 Navajo Indians	54.0	62.3
11 All classes, North American whites	54.6	68.2
12 Los Angeles Negroes	54.9	68.9
13 Children of American business and professional men	55.7	72.2

Based on H. V. Meredith, "Body Size in Infancy and Childhood: A Comparative Study of Data from Okinawa, France, South Africa, and North America," *Child Development*, 19:179-195, 1948.

In the second study² comparison was made of ten-year-old children from various areas and of different races and nationalities. The results appear in Table 2. Of the groups listed, the Okinawan, Bantu, Pueblo, and lower-class Mexican children lived on markedly inadequate diets, which doubtless operated to reduce the size that inheritance alone would have

¹W. D. Matheny and H. V. Meredith, "Mean Body Size of Minnesota School Boys of Finnish and Italian Ancestry," *American Journal of Physical Anthropology*, ns., 5:343-355, 1947.

²H. V. Meredith, "Body Size in Infancy and Childhood: A Comparative Study of Data from Okinawa, France, South Africa, and North America," *Child Development*, 19:179-195, 1948.

caused. The difference in averages between the lowest and the highest is nearly 6 inches and almost 18 pounds. These children were only ten years old at the time of measurement, so presumably none had begun his pre-adolescent or adolescent spurt. Since the taller a child is at ten, the more he is likely to grow during this spurt—a most unfair arrangement—the adult heights and weights of the above groups would probably show differences nearly twice as great.

4 Environmental factors influence growth primarily by furnishing or withholding necessary food materials and by preventing or permitting the spread of disease and infection. The effects of better or poorer nutrition have been investigated in two ways. First, by measuring given age segments of the population at intervals during which the nutritional level has been known to be rising and the disease rate falling, and, second, by measuring individuals before and after a period of privation.

Statistical studies have demonstrated a general world tendency toward an increase of stature for at least the last fifty years. Measurements of recruits in countries that have had universal military service for many decades show increases of both height and weight from the earliest to the most recent generations in the same population. In the United States the men who were drafted in World War II were $\frac{3}{8}$ of an inch taller and nine and a half pounds heavier than their counterparts in World War I. In the middle of the eighteenth century, Frederick the Great had to search all over Europe to find enough men six feet tall to serve as his house guards. At present he could find that many in almost any large California high school.

One especially valuable investigation³ contains reports on the measurement of all school children between ages 6 and 14 in the city of Toronto in the years 1892 and 1939. At the later date, the six-year-olds averaged two inches taller than was the case forty-seven years earlier, and the fourteen-year-olds three inches taller. There had been no change of any moment in the constitution of the population in Toronto during the half century between the measurements. The increase cannot therefore be attributed to variation in racial or family stock but must be regarded as due to better nutrition and greater freedom from disease.

In recent decades there have been two catastrophes that affected profoundly the growth of children and adolescents—the depression of the 1930's and World War II. During the former period the greatest measured losses were among the children of middle-class parents, who met the crisis by reducing the nutritional level rather than by applying to public charities for aid. The children of the lowest-income groups, however, actually gained more than usual, presumably because the food given them in a public diet kitchen or provided for them by charities was more nourishing than that

³H. V. Meredith and E. M. Meredith, "The Stature of Toronto Children Half a Century Ago and Today," *Human Biology*, 16:126-131, 1944.

usually fed to them by their impecunious parents ⁴ Of 23,000 school children in Paris during the first year of World War II, 13 per cent lost weight and 21 per cent failed to make any gain ⁵ And that was at the beginning of the war Just after its close, in Wuppertal, Germany (1946-1949), the weight losses of children there were much greater ⁶

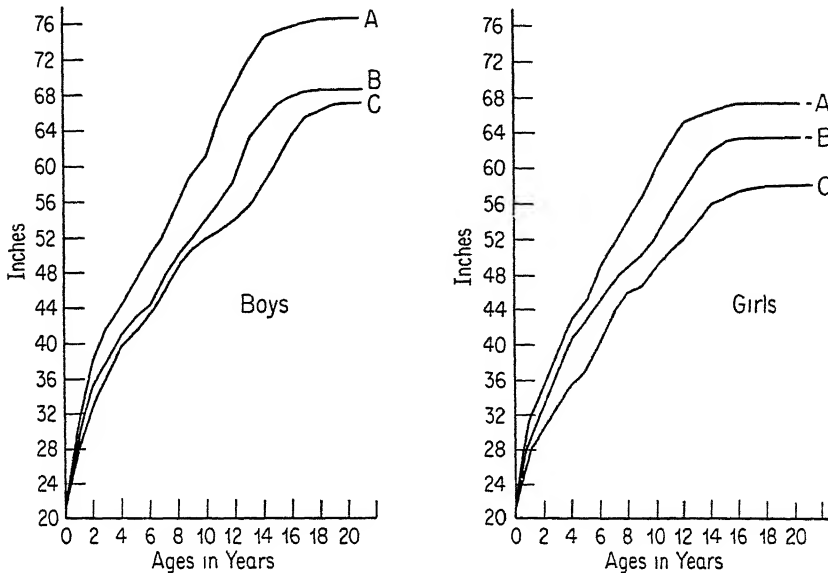


Fig 6 Height of Individual Boys and Girls

Based on N Bayley, "Individual Patterns of Development," *Child Development*, 27 62-63, 1956

Individual Differences in Growth Thus far the discussion has concerned groups of children of various ages and types. References to differences between individuals have been only incidental. It seems desirable, therefore, to present a few results for individuals, in order to emphasize the extent of individual variation.

Curves in height and weight for three boys and three girls appear in Figures 6 and 7. Boy A and Girl A were both taller at twelve and ten, respectively, than Boy C and Girl C at twenty-one. At thirteen Boy A equaled Boy C's final weight, and Girl A at nine was almost as heavy as

⁴ C. E. Palmer, "Height and Weight of the Depression Poor," *U S Public Health Reports*, 50 1106-1113, 1935.

⁵ P. E. Howe and M. Schiller, "Growth Responses of the School Child to Changes in Diet and Environmental Factors," *Journal of Applied Psychology*, 36 51-61, 1952.

⁶ R. A. McCance, et al., "Studies in Nutrition, Wuppertal, 1946-1949," *Special Report*, no 275, Medical Research Council London, Her Majesty's Stationery Office, 1951.

Girl C at twenty-one. The differences in height from the tallest to the shortest girl in this particular study—which involved only a few children—were 3 inches at age 2, $13\frac{1}{2}$ inches at age 12, and $9\frac{1}{2}$ inches at age 21. The tallest boy exceeded the shortest by $8\frac{1}{2}$ inches at age 2, $16\frac{1}{2}$ at age 13, and 10 at age 21. Girl A was at all ages very heavy, and by the time she was

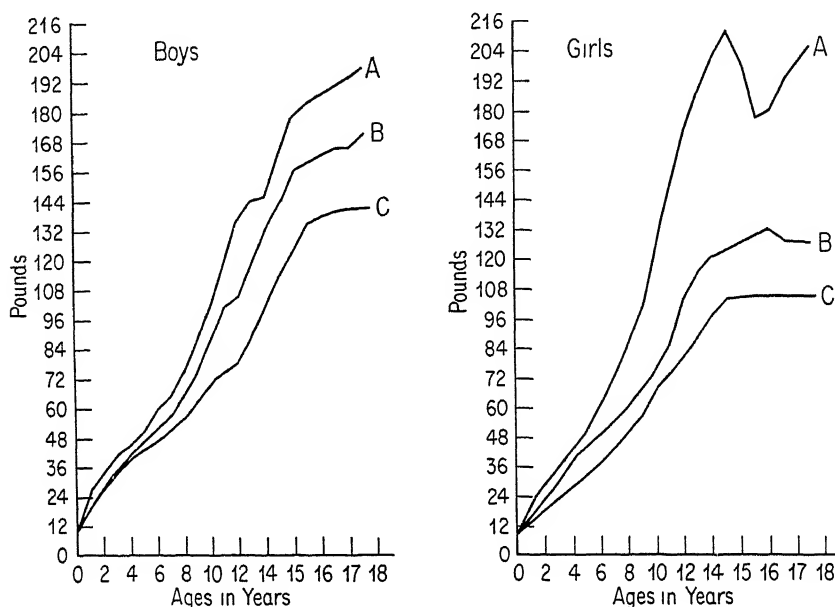


Fig. 7. *Weight of Individual Boys and Girls*

Based on Bayley, *loc cit.*, p. 64

twelve she could be described as obese, since there is no curve for a boy of similar type among those presented, the differences among the girls seem disproportionately large. There is, however, no difference in the degree of variability of boys among themselves as compared to girls among themselves. For the particular sample shown in Figure 7, the maximum differences at ages 2, 12, and 21 for boys were $8\frac{1}{2}$, 57, and 50 pounds, respectively, parallel figures for girls at ages 2, 15, and 21 were 9, 114, and 101 pounds. No two children show identical growth curves.

Figures 8 and 9 also show individual differences, but include variations in build. All these adolescents were fifteen years old. The shortest boy was 7 inches shorter than the tallest, and the lightest was 32 pounds lighter than the heaviest. Boy D is prepubescent, with childish contours, Boy B is already almost a man. Parallel differences among the girls were 9 inches and 38 pounds. Girl D is still childish in shape and size, while Girl E has

a grown woman's build. The extent of such differences is often unnoticed because the larger children are also frequently the brighter ones and tend to be accelerated in school and are therefore not in the same classes as their smaller age-mates.

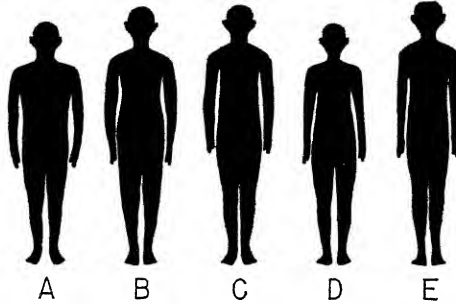


Fig 8 *Variations in Height and Build among Fifteen-Year-Old Boys*

Based on Shuttleworth, "The Adolescent Period," p 40

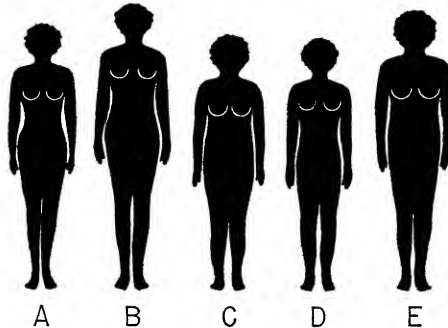


Fig 9 *Variations in Height and Build among Fifteen-Year-Old Girls*

Based on Shuttleworth, "The Adolescent Period," p 38

Bodily Types and Proportions

Of late years, investigators have become increasingly aware of the differences in body build among children and adolescents and of the effect that variations in bodily type have upon individuals. One comprehensive study of men⁷ appeared some years ago, and although no study of equal breadth has been made of women, there have been many that were of smaller scope, enough to outline the major types and problems. For both sexes, there seem to be three main types—the ectomorphs, the mesomorphs,

⁷ W. H. Sheldon, S. S. Stevens, and W. B. Tucker, *The Varieties of Human Physique*, Harper & Brothers, 1940, 347 pp

and the endomorphs. Most people are mixtures rather than pure types, and it is probable that all individuals have in their physical make-up some elements of all three.

The first type, the ectomorphs, are characterized by having a frail and delicate bone structure with long, thin limbs, a small, narrow, flat chest, rounded and sloping shoulders, long but very slender hands and feet, a flat, short abdomen, thin legs, a long, thin neck, a stooping posture, and an S curve in the spine. The musculature is slight, there is little if any fat,

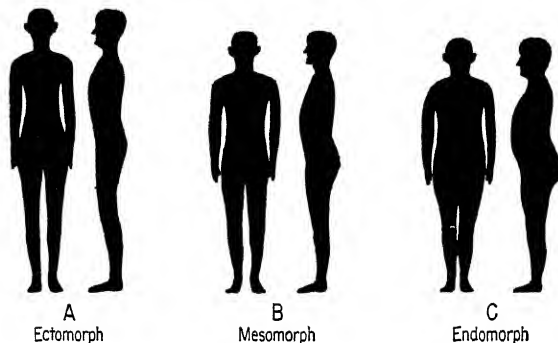


Fig. 10 *Three Types of Body Build among Boys*

Based on Shuttleworth, "The Adolescent Period," pp. 43-45.

and the outline of the bones is often visible through the flesh. Growth of hair is usually profuse all over the body. Silhouette A in Figure 10 is a typical ectomorph. Not all members of this group are tall, but they rather tend to be.

At the other extreme are the endomorphs. Their bodies are predominantly soft and round and smooth, with a strong tendency to bulge. The trunk is large, round, and very thick, the abdomen is especially large and usually protrudes, the head is round and big, it sits atop a short, thick neck, and it contains a face that suggests a full moon, the upper arms and upper legs are extraordinarily wide and heavy, both arms and legs are short, and the hands and feet are much too small for the rest of the body. The fingers are short and pudgy. Endomorphs in youth have fairly strong muscles, although these are of the smooth feminine type. The bodily weight of endomorphs gives them more power than one would expect. At all ages their skeletons are well covered with a smooth layer of fat which prevents the bony structure from showing through. As they grow older they usually acquire several layers of fat, especially around the abdomen and hips and on the upper arms and upper legs. Their skin is usually quite fine, as is

their hair, which is likely to be rather sparse. Silhouette C of Figure 10 shows a young endomorph

Between these two extremes and having some of the characteristics of both, but fusing them into a distinct physical type, are the mesomorphs. These people have a square, strong, tough, hard, firm body, with a long, straight trunk, heavy ribs, broad shoulders, a fairly large but muscular abdomen, a slender, low waistline, and fairly broad hips. The shoulders are, however, usually so wide that by comparison the hips seem narrow. The neck is long but thickish, and facial bones are quite prominent. The

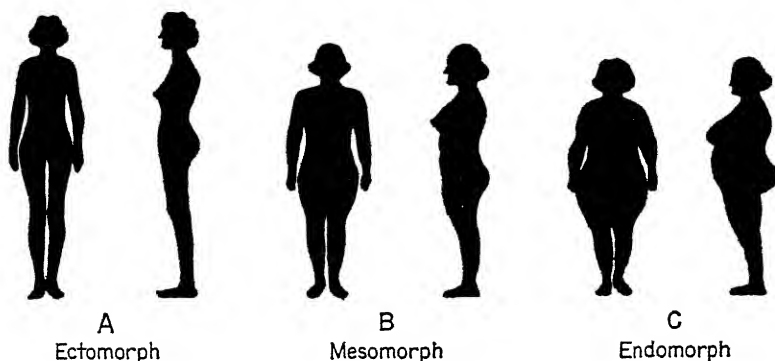


Fig 11 *Three Types of Body Build among Girls*

From W. H. Sheldon, *et al.*, *The Varieties of Human Physique*, Harper & Brothers, 1947, pp 290-299. Used by permission of Harper & Brothers

arms and legs are neither unduly long nor unduly short, but they are powerfully muscled, and the muscles are of the type that form protruding lumps. The forearms, wrists, calves, and ankles are large and thick, with squarish fingers and toes. The skin is thick and the hair coarse. Silhouette B of Figure 10 is that of a typical young male mesomorph.

Girls show the same types of body build. Figure 11 presents the three "pure" types, when one makes allowances for feminine curves and proportions. Girl A is a slender ectomorph, C is a well-rounded endomorph, and B is a square, sturdy mesomorph. A characteristic of the female mesomorph is that her shoulders are usually wider than her hips.

Indirect Results of Differences in Size and Build Size and shape have a profound influence upon the individual who dwells within the body. In American culture, the boy who is short or weak or lightly muscled is likely to lose status among his age-mates, partly because he does not measure up to popular notions of ideal masculinity. The extreme endomorphs are likely to be the butt of jokes because their layer of fat, though not usually excessive in adolescence, reduces their agility and makes them look feminine.

The mesomorphs are generally fairly well satisfied with their build since they have the native equipment for many sports and the proper masculine outlines, but many of them are too short for certain types of competitive games. One investigator^s studied 256 boys between the ages of eleven and sixteen, all of whom had inadequate masculine physique. There was no one of them who did not have some problem, large or small, of adjustment, because of his consciousness of his own inadequacy. The trials of the tall girl ectomorph are of a different nature. She is as tall as most boys, and since she almost certainly matured much earlier than boys of her own age, she has passed through a period during which she was conspicuously taller than boys of her own age. The female adolescent endomorph tries all kinds of diets and may exercise diligently, but she continues to be too round and too dumpy looking for her taste. She never has what is regarded as proper adolescent chic because she cannot make herself flat enough and especially because her main protuberances are in the wrong places. The feminine mesomorph is likely to be a tomboy in childhood and a competitor of boys in her adolescence. She outplays boys until the time when they begin their final growth spurt. Subsequently, their long arms and legs give them such leverage and speed that she can no longer compete. Other girls may look down on the mesomorph because she is not "feminine", boys often actively dislike her because she is a competitor, not an admirer, and she is almost certain to pass through a period of stress during adolescence because the tomboy habits of her childhood are no longer useful in maintaining prestige and may become actual menaces to her position among either boys or girls.

Adolescents often make quite extreme reactions to compensate for their size. For instance, a tall girl may never go to dances because she is certain to be taller than most of the boys she dances with. Or a large girl may go in for athletics, politics, masculine clothes, and a career because she cannot be "cute" and feminine. Or a small-sized boy may become a "grind" largely because he cannot compete on equal terms physically with other boys—and may, if he attempts games, even be beaten by girls. Very tall boys also have difficulties of adjustment. Chairs, desks, beds, driving seats of cars, and even doorways are too small for them. Whenever they are on their feet, they cannot help feeling conspicuous, and they are constantly being reminded of their height by inquiries about the condition of the atmosphere up where they are, and by similar pleasantries. The writer knows one girl of six feet two who was so miserable in American schools that she went to Sweden for her education, where her excessive height would be less conspicuous and where she would not be forced every week into three hours of gymnasium work and four hours of participation in some game—all of

^s W. A. Schonfeld, "Inadequate Masculine Physique as a Factor in Personality Development of Adolescent Boys," *Psychosomatic Medicine*, 12:49-54, 1950.

which made her acutely miserable. Fat girls and boys are among the unhappiest of adolescents and are almost always maladjusted. Often their obesity is basically due to glandular dysfunction, which may be helped to some extent by proper medicine and diet. This matter of the pervasive effect of physical condition in influencing both personality and social prestige will be discussed further in later sections.

Anyone who doubts the importance of variations in height, weight, or appearance from the average should listen to adolescent nicknames. Shrimp, Skeeter, Beanpole, Bug, Spider, Butch, Fatty, Big Boy, Shorty, Baldy, Whitey, Spike, Whale, Swede, Machine Gun, Blubber, Foxy, Squeaky, Piggy, Barrel, Dopey, Stinky, Bull, Cotton, Slim, or Tiny—generally used ironically. Other nicknames are derived from places of residence—Texas, or Boston, from distortions of real names—Gus, Sambo, or Maige, or from defects of personality—Show-off or Sissy. Usually a nickname is a sign of affection, admiration, and popularity among adolescents,⁹ although a few of the derogatory ones are not.

Proportional Growth. The various parts of the body grow at different rates and reach their maximal development at different times. The head, for instance, does the major part of its growing before birth, and most of the rest soon after. At birth it equals one fourth of the baby's total length. At age 6, it is already 90 per cent of its adult size and equals one sixth of a child's height. In adulthood, the head is one eighth of the body's length. In contrast, the long bones of the arms and legs are extremely short at birth, remain comparatively short during childhood, and then lengthen quickly just before or during adolescence. At puberty they are four times as long as they were at birth, and at maturity five times as long. Adult legs make up half the total height as compared to less than a third at birth. The trunk is relatively long at birth but doubles its length by age 6, it grows little from then till the later years of adolescence. At maturity the trunk is three times as long and wide as it was at birth, and two and one half times as thick. These different rates of growth give the baby, the child, the adolescent, and the adult their characteristic outlines, as illustrated in Figure 12. The diagram shows both proportions and size at intervals from birth to maturity. The two silhouettes of Figure 13 show the typical adult outline and the outline an adult would have if he retained, without alteration, the proportions of a newborn baby and merely grew larger.

In a profile view, the waistline does not show much, if at all. If the silhouettes were drawn from the front or the back view, it would be evident that the child had no waistline. A small girl's shorts and slacks will stay sufficiently "up" for purposes of modesty because her hips are a little wider

⁹ F. S. Dexter, "Three Items Related to Personality: Popularity, Nicknames, and Homesickness," *Journal of Social Psychology*, 30: 155-158, 1949.

than her superstructure, and her buttocks protrude a trifle, but keeping a small boy's shorts on him presents a real problem, because he is the same width from shoulder to knee and perfectly flat, he has constantly to "hitch"

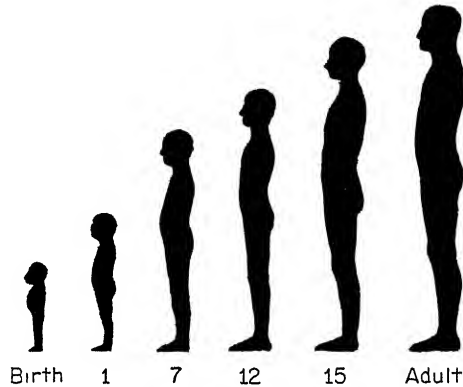


Fig 12 *Characteristic Proportions at Different Ages*

Based on J P Schaefer (ed.), *Morris' Human Anatomy*, 10th ed, 1942, p 25 Used by permission of The Blakiston Company, publisher

them, since there are no protuberances in his shape to prevent gravity from pulling them down until they come to rest somewhat precariously on the lower edge of his buttocks In early adolescence the waistline appears, but

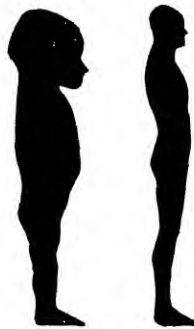


Fig 13 *Comparative Proportions*

Based on Schaefer, *op cit*, p 44 Used by permission of The Blakiston Company, publisher

it is very high because the trunk has not yet grown proportionally as much as the legs Toward the end of adolescence the lowering of the waistline adds the last development needed for the achievement of adult proportions

The growth of the muscles and the depositing of fat just below the skin have their own pattern and rhythm of development, which is affected only

slightly by exercise or by diets unless they are of extremely high or low caloric intake. At birth the muscles make up 27 per cent of the total body weight. At age 15, they have become 32 per cent and at age 16, 44 per cent—or nearly half the weight of the body. During childhood girls often have a slight deposit of fat on their arms, legs, chests, and abdomen—just enough

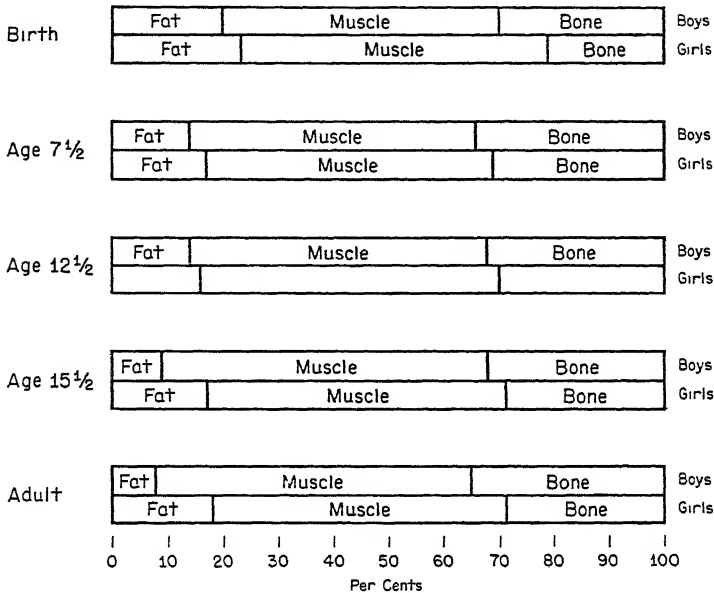


Fig 14 Growth in Fat, Muscle, and Bone

Based on E. L. Reynolds and P. Grote, "Sex Differences in the Distribution of Tissue Components in the Human Leg from Birth to Maturity," *Anatomical Record*, 102: 45-53, 1948

to give them a curved rather than a flat appearance. Boys have much less. Members of both sexes begin to put on larger quantities of fat under the skin at about the period of pubescence. The tendency is especially noticeable in girls, most of whom now have a layer of fatty tissue over almost the entire body. The comparative growth of fat and muscle in the two sexes has been studied in great detail from birth to maturity. The muscles selected for intensive study were those in the calf of the leg. Boys exceeded girls almost from infancy in the breadth of the muscle, while girls exceeded boys in the depth of fatty tissue between muscle and skin. The proportion of fat, muscle, and bone at five different age levels is shown in Figure 14. For boys the proportion of fat is never quite as high as for girls. By the time adulthood has been reached, a man's leg contains only 8 per cent fat, while

a woman's contains 18 per cent, but his bones and muscles are both bigger and heavier. These differences became more pronounced with age and continue into adulthood.

It is this characteristic development and the distribution of fat and muscle that prevent a boy from swimming more than a few minutes in cold water in which his twin sister can swim in comfort for an hour. After the beginning of adolescence a boy's increased arm and leg length and strength permit him to swim short distances faster than most girls, but almost any girl can remain in the water as long as she wants to without getting muscle cramps, because her muscles are well insulated by fatty tissue. Moreover, this same tissue allows her to float whenever she gets tired. It is no accident that more women than men finish distance swims, although only a very small proportion of girl swimmers ever attempt them.

Summary

Adolescence is a period of growth. In the course of a few years the individual undergoes changes in both size and proportion—changes that take him from a childish to a mature level. The rapidity, variety, and force of these developments are alike bewildering, even though they are sometimes exciting and satisfactory. The alterations are indeed so extensive that some people have regarded adolescence as a sort of second birth. Usually there is some degree of malco-ordination to be seen during the period. Both the schoolwork and the personalities of junior high and high school pupils are affected by the concurrent processes of growth. It is therefore essential that teachers should keep in mind the physical background of adolescence so that they may not attribute to other causes those indirect manifestations that are mainly the result of mere growth.

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3

Skeletal Growth

The bones of the body change not only in length and size from birth to maturity but also in density and in hardness. In addition, they change their shape. Some of the smaller bones are not present at birth, and some of the larger ones are mostly cartilage. If a baby's bones were not soft, he could never be born, because no rigid body of six to eight pounds could pass down the mother's birth canal.

Bones of Hand and Wrist

The most usual method for determining the growth of the skeleton is to make X-ray photographs of the bones in the hand and wrist, and then to estimate general skeletal age from this sample. The bones that show in such pictures have their own method of growth, which must be understood before the X-ray pictures, shortly to be presented, will be intelligible.

Each finger is composed of three small straight bones which are aligned with a fourth and longer bone in the back of the hand. The thumb has only two short bones instead of three, plus a long one from its base to the wrist. The arm is composed of two long bones, one considerably thicker than the other, the ends of which appear in the pictures. In the wrist there are at maturity no less than 8 small bones marvelously fitted together and shaped to the nearer ends of the long bones which underlie the back of the hand and to the wrist end of the arm bones. There are also two tiny bones that develop during early adolescence on the first joint of the thumb. There is, then, a total of 31 small bones: 3 in each finger = 12, plus 3 long and 2 little round ones in the thumb = 17, plus 2 in the arm = 19, plus 4 in the hand = 23, plus 8 in the wrist = 31. Although there are minor variations from bone to bone, all the long bones of the fingers follow the same general pattern of growth. They become longer and the cartilage slowly changes to bone, that is, the cartilage "ossifies." As a result, the X-ray pictures show a sharper definition, because a hardened bone throws a more clearly outlined shadow than a soft cartilage. In addition to ossifying, the finger bones (called phalanges¹) and the bones in the back of the hand (called metacar-

¹ The singular is phalanx.

pals) acquire a sort of appendage called an epiphysis, which they subsequently absorb. Each epiphysis grows into a shape that fits the bone to which it becomes attached. Figure 15 records the growth in length and shape of five bones and of the epiphyses that eventually fuse with three of them. In column 1 are the outlines, as they appear at birth, of (A) the first phalanx of the middle finger—the phalanx nearest the body—(B) the corre-

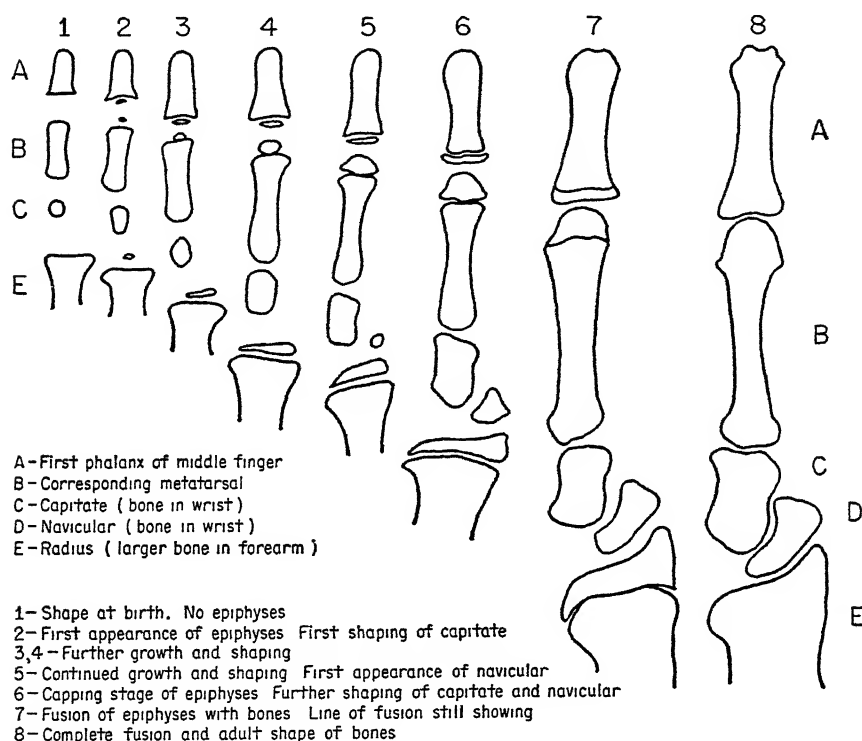


Fig 15 *Diagram Showing Growth of Bones and Epiphyses*

Drawing made from X rays in T W Todd, *Atlas of Skeletal Maturation*, C V Mosby Co., 1937

sponding metacarpal, (C) one of the bones in the wrist, and (E) the end of the larger of the two bones in the forearm—the radius. It will be noted that there are wide spaces between each two bones in this series

The epiphysis of the phalanx first appears as a small dot. Then it flattens out into an oval disc which gradually becomes as wide as the end of the phalanx (column 5) and then develops curved edges that permit it to “cap” the end of the bone (column 6), at the same time fitting itself perfectly over its entire surface. Finally, it grows on to the phalanx. For a

little while, a thin line shows along the edge of the union (column 7), but presently phalanx and epiphysis fuse into a single, solid bone (column 8). The epiphysis of the metatarsal also first appears as a dot of cartilage, but it continues to be round, gradually becoming larger (columns 2-5). It then broadens where it will attach itself to the bones, assumes a shape to fit the bone surface (columns 6-7), and finally becomes a knob. It should be noted that the adjoining surfaces of the two epiphyses have also shaped themselves to each other (column 8). The epiphysis of the radius begins as a tiny disc (column 2), becomes an elongated oval (columns 3-4), grows thicker at one extreme than at the other, and becomes shaped on one surface to fit the end of the radius and on another to fit the nearest wristbone (columns 5-8).

The wristbones follow a different pattern of growth. They begin as small round or oval lumps of cartilage and grow, not only by becoming bigger and by ossifying, but by changing their shape. Each bone grows as many distinct "faces" as may be necessary to fit it to other wristbones and to the base of whatever long bones it will move upon. Since each bone in the wrist has a different position and function from those of any other, each has its own pattern of growth. Two samples appear in C and D of Figure 15. Bone C begins as a dot of cartilage, becomes round and then oval, elongates, and gradually assumes an irregular shape, with a depression in one face into which a curved end of the second bone (D) fits when both are mature. The nearer end of the metatarsal and the farther face of the bone also develop so as to fit each other. Bone D does not appear until a child is between four and six years old. It goes through the same initial stages as Bone C, then becomes a triangle (column 6), and finally a sort of crescent (columns 7-8), the curves and points of which fit the shapes of adjacent bone structures. When the five bones shown in Figure 15 attain adult shape and size—normally at age 17 for girls and age 19 for boys—they articulate upon each other to form a series. At maturity the long bones (A, B, and E) with their fused epiphyses are several times longer than at birth, as indicated by the increasing space they occupy in the diagram.

In the X-ray photographs, which are presented in Figures 16 to 25 on pages 37 to 41, one can trace the developments already briefly outlined, and see what is meant by "skeletal age." The first photograph (Figure 16) shows at the left the X-ray of a three-months-old girl's hand. The picture for the three-months-old boy has been omitted, since it does not differ from that of the girl. Eight pictures (Figures 18-25) show the X-rays for a girl and a boy at the ages 2 years 3 months, 6 years 9 months, 12 years 9 months, and 14 years 9 months. Because the pictures are mounted together, one can see the contrast in the rate of development. Figure 17 shows the X-ray for the hand of a girl age 16 years 3 months. There is no boy's hand for comparison, since both are by this age equally mature, and the boy's hand differs only in size. The baby's picture (Figure 16) shows soft, indistinct



FIG 16



FIG 17

Fig. 16 X-Ray of a Girl's Hand, Age Three Months

Fig 17 X-Ray of a Girl's Hand, Age Sixteen Years Three Months

These pictures and those that follow in the series are from T W Todd, *Atlas of Skeletal Maturation*, C V Mosby Co, 1937 These are from pp 135, 203 The pictures are used by permission of C V Mosby Co

shadows for the 19 long bones that make up the fingers and hand, and for the ends of the two bones in the forearm, there are also two smallish dots that will develop into wristbones. This picture explains why one cannot push a small baby's arm into a sleeve but must reach two fingers through the lower end of the sleeve, grasp the baby's hand, and back out of the opening, pulling the infant's hand through after one's own, the baby's bones are not yet jointed, and his hand, when pushed toward a sleeve, simply folds back on the arm. At age 2 years 3 months the average girl (Figure 18) has developed disc-shaped epiphyses at the base of the phalanges, ball-shaped ones for the metatarsals, and an epiphysis on the radius. The two wristbones that were present at birth have reached the oval stage, and two more



Fig 19 *X-Ray of a Boy's Hand, Age Two Years Three Months*

Fig 18 *X-Ray of a Girl's Hand, Age Two Years Three Months*

From Todd, *op cit*, pp 147, 67



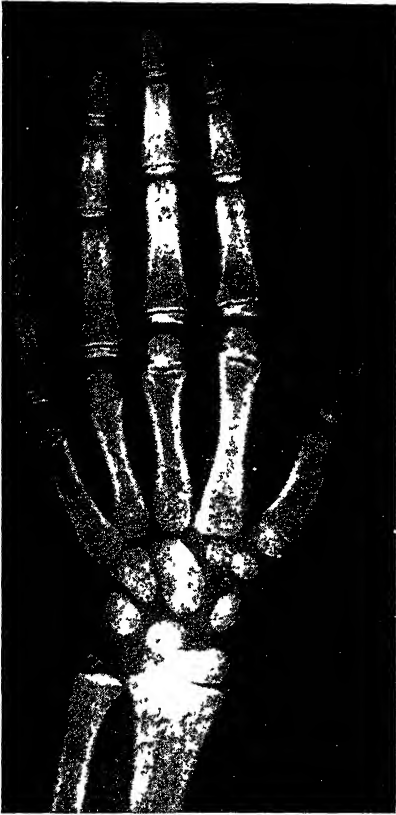


FIG 20



FIG 21

Fig 20: X-Ray of a Girl's Hand, Age Six Years Nine Months

Fig 21 X-Ray of a Boy's Hand, Age Six Years Nine Months

From Todd, *op cit*, pp 165, 85

have appeared. At age 6 years 9 months (Figure 20) the girl has epiphyses that are as wide or almost as wide as the bones they will fuse with, and they have begun to shape themselves to provide a close fit. The wrist now contains seven bones. The increase in ossification is shown by the increased sharpness and clearness of all the shadows. At age 12 years 3 months (Figure 22) the girl's epiphyses are in the capping stage and are ready to fuse with the bones. She has no new bones in the wrist, but the seven have grown larger and have changed their shapes. By the end of her fourteenth year (Figure 24) much fusion has taken place, although one can still see in many places the thin line between epiphysis and bone. The chronologically last picture in this series, which appears as Figure 17, shows a practically adult hand and wrist.



FIG 22



FIG 23

Fig 22 X-Ray of a Girl's Hand, Age Twelve Years Nine Months

Fig 23 X-Ray of a Boy's Hand, Age Twelve Years Nine Months

From Todd, *op cit*, pp 189, 109.

Figures 19, 21, 23, and 25 give a similar series for boys. Figure 19 should be compared with Figure 18. At least five epiphyses in the boy's hand are lacking and another five are mere dots. The earliest two wrist-bones are not quite oval, and no others have developed. The bones are appreciably less dense than those of the two-year-old girl. At age 6 years 9 months (Figure 21) the epiphyses of the phalanges are neither as long nor as shaped as those of the girl (Figure 20) and the metatarsal epiphyses are rounder; there is also more unossified area in the boy's wrist than in the girl's. The boy's bones are, however, already a bit bigger than the girl's. This difference in size becomes steadily more marked with age. Comparison of Figure 23 with Figure 22 shows the boy to be still less mature than the girl, since there is less capping, less fusion, and less shaping. The bones



FIG 24



FIG 25

Fig 24 X-Ray of a Girl's Hand, Age Fourteen Years Nine Months

Fig 25 X-Ray of a Boy's Hand, Age Fourteen Years Nine Months

From Todd, *op cit*, pp 197, 117.

of the hand in Figure 23 show some fusion of the metatarsals with their epiphyses, but very little elsewhere. The average boy reaches the mature stage, such as appears for girls in Figure 17, about two years later than the average girl. At maturity, there is almost no empty space left in the wrist, and the bones have become dense enough to throw a clearly defined shadow on the X-ray plate. At age 14, the boy's hand, while a little less mature than the girl's, is already appreciably bigger.

There is a marked relationship between the age of puberty and the skeletal age. Figure 26 on page 42 shows results for three groups of girls who matured at different ages. At age 7 the girls who—as later proved—matured early already had a skeletal age of over eight, and they remained consistently in skeletal age from one and a half to two years ahead of

their chronological age. All three groups maintained their relative positions to each other during the entire decade covered by the measurements.

There are large individual variations in skeletal growth. A few individual curves for girls, based upon consecutive measurement of the same individuals, are shown in Figure 27 on page 43. The measures are in terms of the calcified area in the bones of the wrist. The norms for this measure-

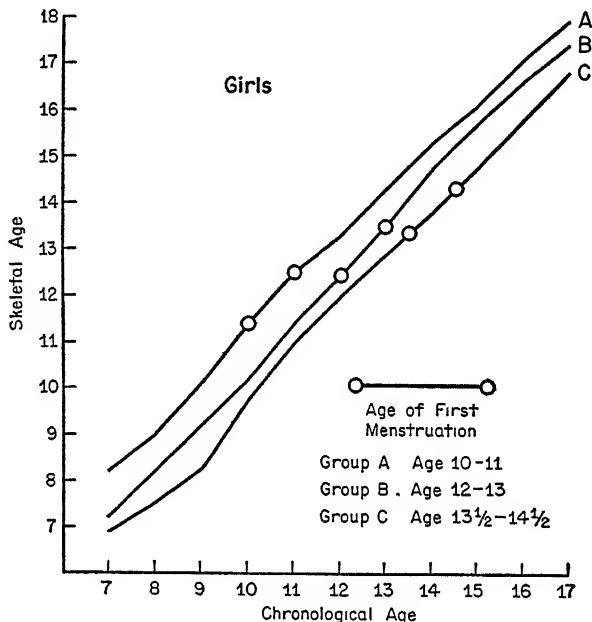


Fig 26 Skeletal Age and Maturity

From F. K. Shuttleworth, "Sexual Maturity and the Skeletal Development of Girls Ages 6 to 19," *Monographs of the Society for Research in Child Development* (No. 5), 3:2, 1938. Used by permission of the publisher.

ment are indicated by lines drawn across the figure. At age 8, Girl B had a calcified area in her wrist above that of the average girl of age 9½, whereas Girl F's wrist area at the same age was well below that of a normal five-year-old. At age 14 the corresponding variation for these two girls was from the average of age 8½ to well beyond the average of age 15½. Girl A reached what appears to be her maximum development between ages 12 and 13. Girls E and F were still growing at sixteen, but Girls C and D showed signs of stopping growth between fourteen and fifteen. Girl F at all ages was extremely retarded. At age 14½, the last measurement made, she had the skeletal age of eight and a half years.

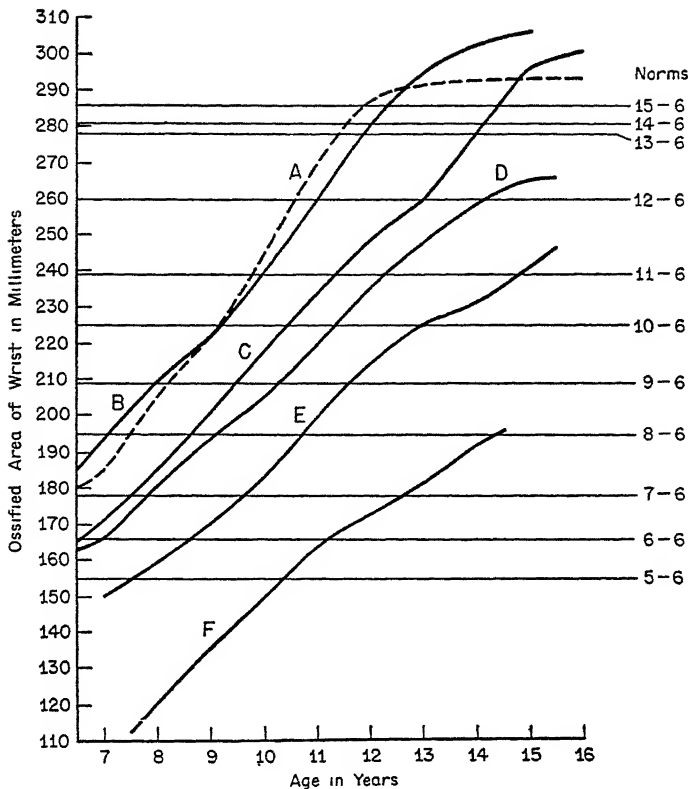


Fig 27 Individual Curves of Skeletal Growth

From P. Cattell, "Preliminary Report on the Measurement of Ossification of the Hand and Wrist," *Human Biology*, 6: 461, 1934. Used by permission of the publisher.

Growth of the Teeth

The teeth also have characteristic growth rates. The permanent teeth begin pushing out the baby teeth when a child is five or six years old. From that time on until the early years of adolescence a child acquires 1 or 2 teeth each year. The thirteen-year-old has 26 or 27 of his 32 teeth. As in all kinds of physical development, the girls are in advance of the boys, their teeth erupt earlier, so that at all ages they have a larger number.² The second molars usually erupt at the beginning of adolescence. Their appearance is one of the surest signs that puberty is close. The third molars, or wisdom teeth, erupt at some time after seventeen years of age. The cutting of these molars is often a painful process, and they may cause both dental trouble and emotional distress when they arrive.

² P. Cattell, "Dentition as a Measure of Skeletal Growth," *Harvard Monographs in Education*, no. 9, 1938, 91 pp.

Growth in Facial Bones and Features

An individual's face also grows, slowly in childhood and then more rapidly in the early years of adolescence. The nose and mouth widen, the nose becomes longer and more prominent, and the jaw juts out farther. The upper part of the face usually grows faster than the lower, the jaw being commonly the last feature to attain its adult size and angle. Although some faces grow in a symmetrical fashion, most do not. Adolescents typically have unbalanced and asymmetrical faces, which are sources of much embarrassment to them. Because the nose generally begins to grow earlier

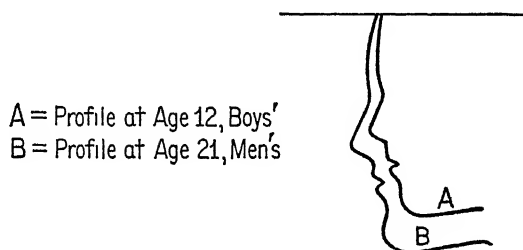


Fig. 28 *Diagram of Facial Growth*

Based on A. Bjork, *The Face in Profile*, Berlingska Boktryckerist, Lund, Sweden, 1947, pp. 127, 130.

than the rest of the face, the thirteen- or fourteen-year-old child seems destined for a while to imitate Cyrano de Bergerac. Matters are not helped by increases in the height of the forehead, since these changes make the upper part of the face too heavy. They also make the eyes seem smaller, although actually these do not change in size at all. In an infant's face, the eyes look enormous, in a child's face, they seem large, in an adolescent's face, they have merely assumed their adult relation to the rest of the face. It is usually a year or two and sometimes longer before the chin develops and nicely balances the already-mature nose, giving the face the underlying bone structure of maturity. Another source of asymmetry of the face during adolescence is its tendency to grow in length before it grows in width.

The differences in facial proportion are well shown in Figures 28 and 29. The first is a diagram that shows the changes in profile between ages 12 and 21, as shown by an extensive study of twelve-year-old boys and army recruits.³ The second figure shows a series of four profiles of the same boy

³ The statements in this paragraph and the following ones are based upon measurements by A. Bjork, *The Face in Profile*, Berlingska Boktryckerist, Lund, Sweden, 1947, 180 pp., and M. S. Goldstein, "Development of the Head in the Same Individuals," *Human Biology*, 10: 197-219, 1939.

at four different ages: 5, 10, 15, and 20. The forehead is first bulging, then flattish, and then again bulges, but in a different way. The nose becomes longer and much thicker. The childish depression just above the nose fills out, and then the jutting forward of the brows produces a concavity of a different shape and type. In the adult profile, the features are larger, more angular, and stand out farther than in the childish ones, thus giving the face

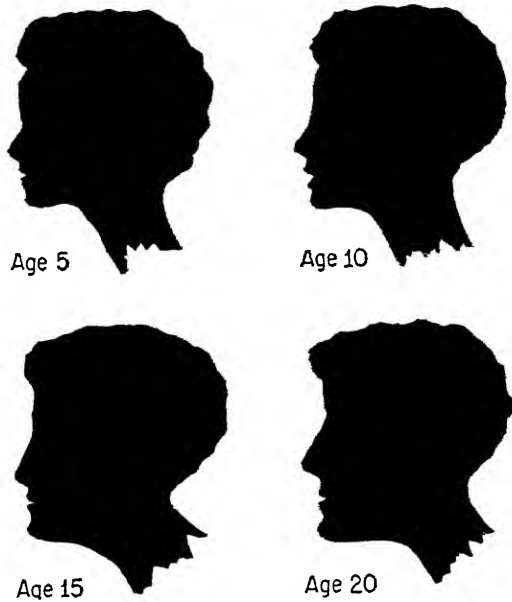


Fig. 29: *Profile of the Same Child at Five, Ten, Fifteen, and Twenty Years of Age*

greater depth. In early childhood the lips are flat, and they do not become full and curved until fairly late in the development of the face. The chin is the last feature to change from youthful to adult size and shape.

Summary

The bones of the body grow in length, width, and thickness as children mature. The most characteristic developments during adolescence are the lengthening of all the long bones and the final articulation of all the bones at their respective joints, changes which underlie the increases in height and strength. The wisdom teeth appear, causing some trouble, as the modern jaw is often too small to accommodate them. The face changes

a great deal, loses its childish contours, and by the end of adolescence has acquired adult proportions.

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4

Growth in Strength and in Various Athletic Skills

The materials of this chapter include measures of co-ordination, agility, strength, and simple athletic abilities, such as running and jumping. At the end there is also some discussion of the indirect effects upon personality, social status, and adjustment of having or not having such fundamental motor skills.

Co-ordination and Agility. The development of motor co-ordination, balance, and general agility during childhood, preadolescence, and adolescence has been shown by four sets of results, each indicative of a different phase of growth. One investigator measured the ability of children to keep their balance when walking on a rail.¹ For this measurement the investigator used three rails—one 4 inches wide and 9 feet long, one 2 inches wide and 9 feet long, and one 1 inch wide and 6 feet long. Each child made three trials on each rail. His total raw score was the total number of feet that he remained on each rail at each of his nine trials. Since, however, the rails were of different widths and the balancing task therefore of varying difficulty, the distance that a child made on his three trials on Rail I was left as it stood, that on Rail II was multiplied by 2, and that on Rail III by 4. If a child walked the full length of all three rails, his score would be 153. The boys began at age 6 with an average score of 35, rose to 92 at age 12, and to 116 at age 14. Their 75th percentile at these three ages were, respectively, 56, 109, and 148. The girls began a shade higher than the boys, with an average score at age 6 of 40, and remained equal or slightly superior during the next few years, but then they began to fall behind. At age 12 their average was 93, and at age 14, 101. Their 75th percentiles at these ages were 56, 109, and 126. Since rail walking is a skill that requires no special strength and since girls as a group are less awkward than boys at these ages, their low adolescent scores must be due to lack of interest rather than to lack of native equipment for the task.

¹ S. R. Heath, "Preliminary Maturational Norms for Boys and Girls," *Motor Skills Research Exchange*, 1:34-36, 1949, and S. R. Heath, "Clinical Significance of Motor Development with Military Implications," *American Journal of Psychology*, 57:482-499, 1944.

Another investigator measured the accuracy of aiming of youngsters between the ages of $6\frac{1}{2}$ and $17\frac{1}{2}$. The average scores on this test appear in Figure 30. The score of the seventeen-year-olds was taken as the standard and other scores were expressed in terms of the per cent of each of the male scores at this age. In aiming, the girls exceeded the boys at all ages. They reached the standard at $13\frac{1}{2}$, and from then on scored appreciably above it. Aiming is a skill which requires relatively little strength, but it does take

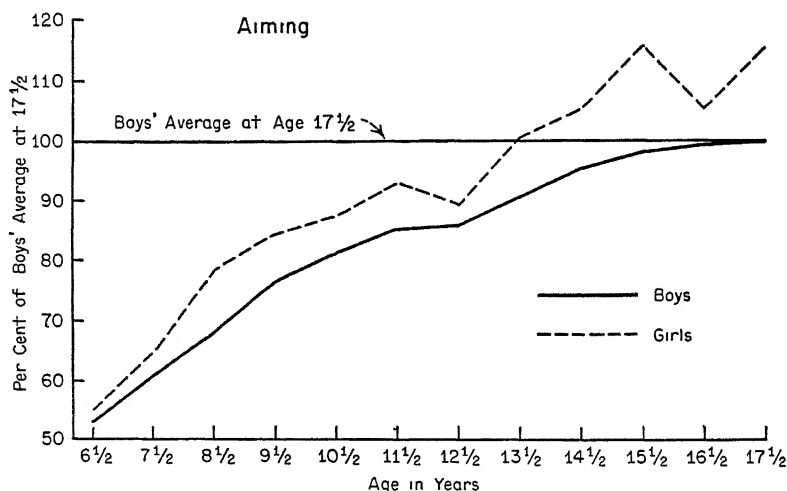


Fig 30 *Growth in Aiming*

From J. E. Anderson, *The Psychology of Development and Personal Adjustment*, Henry Holt and Company, 1949, pp. 138, 139. Used by permission of the publisher.

patience, a trait in which many girls excel because they do more things requiring small, accurate eye-hand adjustments than do boys. And they are more mature in all ways, including their eyesight. In their ability to handle a basketball the boys were slightly superior to girls during middle and late childhood, but after the girls entered puberty their rate of improvement became slow while that of the boys increased markedly (Figure 31). Since relatively little strength is involved, the difference is due in large measure to a greater familiarity with handling basketballs on the part of the boys, to better leverage, and to greater interest. It is probable that if one compared playing skills among members of basketball teams for boys and for girls the differences would be small.

The third investigator traced the development of 325 girls and 285 boys in agility and control from ages 11 to 16. The results appear in the two graphs in Figure 32. They are expressed in terms of the per cent of girls and boys who passed each test in each age group. Up to age 13 the

girls were superior in agility, after age 13, the boys excelled. At age 16 fewer girls passed the agility test than at 15. If the curves were prolonged into the later adolescent years, the differences would probably continue upward for the boys and downward for the girls. The girls show a clear

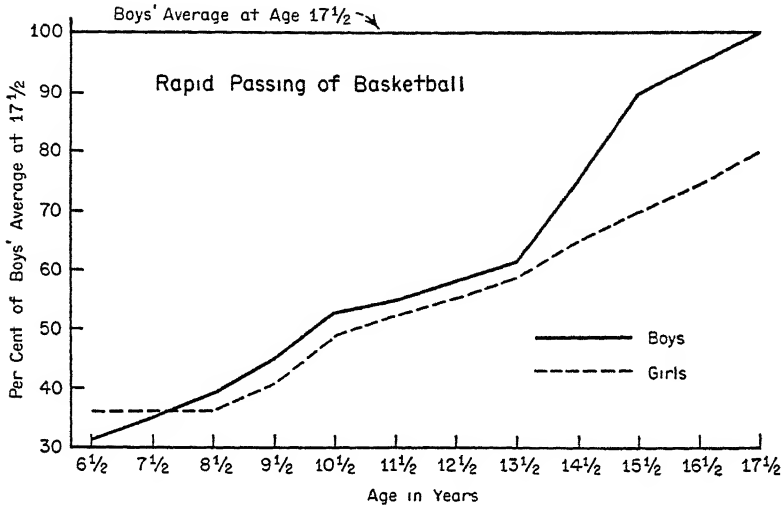


Fig 31 Growth in Rapid Passing of a Basketball

From Anderson, *op cit*, pp 138, 139 Used by permission of the publisher

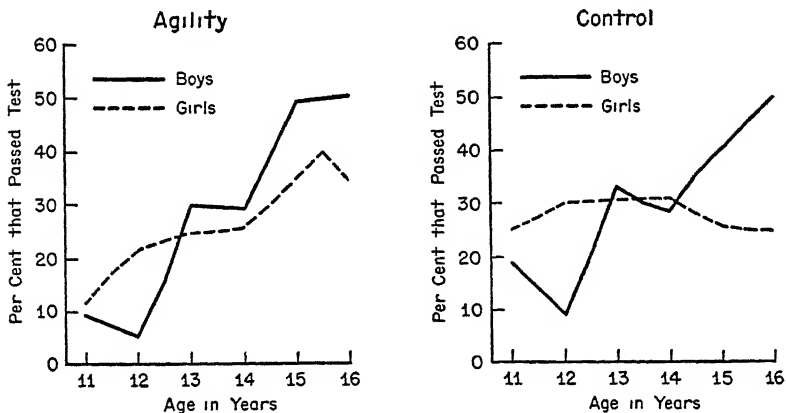


Fig 32 Growth in Agility and Control

From A. Espenschade, "The Development of Motor Co-ordination in Boys and Girls," *The Research Quarterly of the American Association for Health, Physical Education, and Recreation*, 18:36-40, 1947. Used by permission of the publisher

superiority at first in control, but make essentially no improvement with age, whereas more and more boys pass the test at each age after 14

Strength Probably the most satisfactory study of strength in adolescence is one that follows the development, from ages 11 to 17½, of 89 boys

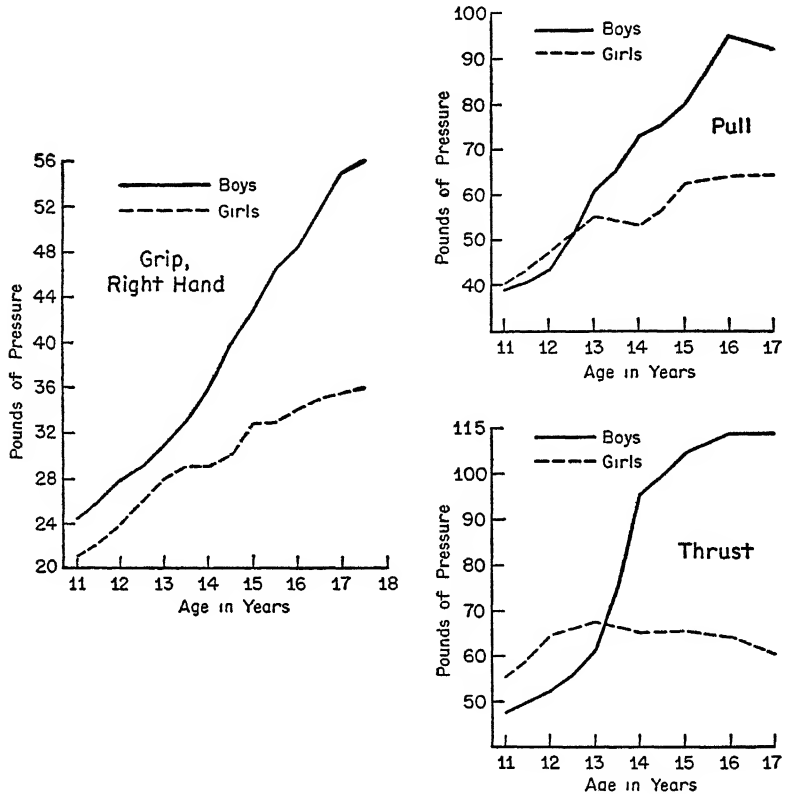


Fig 33 Growth in Strength

From H E Jones, "Motor Performance and Growth A Developmental Study of Static Dynamometric Strength," *University of California Publications in Child Development*, 1 35-36, 1949 Used by permission of the University of California Press, publishers

and 87 girls² The number of cases is relatively small, but the same children were measured every six months, with the result that one gets a picture of longitudinal growth Results are given in Figure 33 for (1) strength of grip, for (2) exerting a pull when the arms are held at shoulder level with the elbows slightly bent and the registering instrument grasped by both hands

²H. E. Jones, "Motor Performance and Growth A Developmental Study of Static Dynamometric Strength," *University of California Publications in Child Development*, Vol I, No 1, 1949, 181 pp

at chest level, and for (3) exerting a thrust in the same position. In strength of grip boys are superior to girls at all ages, but the significant differences do not appear until the boys begin to mature. The difference between boys and girls at age 11 was 4 pounds of pressure, at 17 it was 20 pounds.

In the pull-and-thrust tests, girls were superior to boys at age 11 by 2 and 7 pounds, respectively. For these tests leverage is especially important, and girls of 11 or 12 have outgrown boys in length of arm, width of

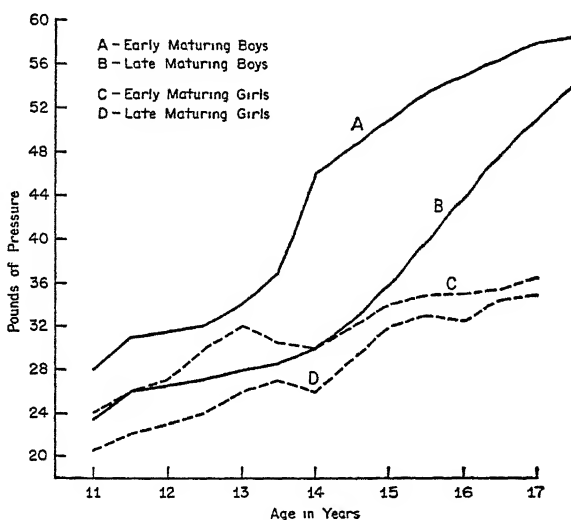


Fig. 34. *Maturity and Strength (1)*

From Jones, *loc cit*, p. 63. Used by permission of the University of California Press.

shoulder, and weight because they are already preadolescent while boys are not. Their ability to thrust is very nearly as good at 11 as it is at 17. Boys, however, make enormous gains in both tests after the age of 13. In all cases the great increase in strength occurs during the years when the largest proportion of boys become mature.

The effects of the age of maturity upon strength have been especially well shown by two investigators. Early-maturing boys, as shown in Figures 34 and 35, were at all ages stronger than boys who matured late. The same is true of girls, but to a much smaller degree.

The second investigator gave a number of strength tests and totaled the scores. The higher this total is, the greater the strength. The boys in the investigation were grouped, at each age from 12 through 16, according to their stage of maturity. Some were quite immature or prepubescent, that is,

their sex organs had not yet started their characteristic adolescent growth. Some were pubescent, that is, the changes had begun but were not yet complete. Members of the third group were mature, or postpubescent, that is, their organs were of adult or nearly adult size and were adult in function. To present the clearest contrast only the first and third groups are included in Figure 35. At every age the mature boys are markedly superior

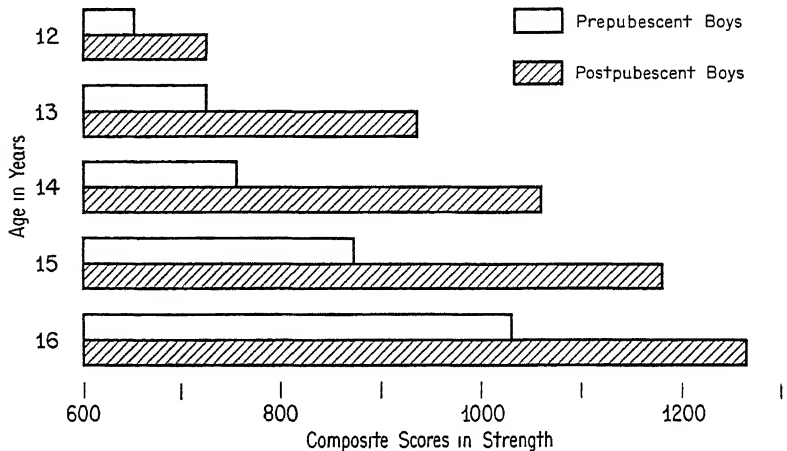


Fig. 35 *Maturity and Strength (2)*

Based on figures in H. S. Dimock, *Rediscovering the Adolescent*, Association Press, 1937, p. 238.

Athletic Skills The development of athletic skill obviously depends upon growth in the length and power of legs and arms, upon increases in muscular strength, upon improvements in co-ordination, balance, and general agility. One investigator, who followed the development of children through the adolescent years from 12 years 9 months to 16 years 9 months, measured each half year the speed with which they could run, the height to which they could jump and reach,³ the distance to which they could throw a ball, and the width of their broad jump. The results appear in Figure 36. In all four forms of exercise the boys made marked improvement, but the girls ran more slowly and could jump a shorter distance as they grew older. Their ability to throw a ball and to jump upward increased a little. The difference between the sexes became greater with the passage of time. At 12 years 9 months the inferiority of the

³ The "jump-and-reach" test was as follows: a child stood facing a wall, with a piece of chalk he made a mark as high up as he could reach with his heels still on the floor, then he jumped and reached, making another mark at the height of his leap. The upward jump was measured by the distance between marks.

girls was, respectively, on the four tests, a fourth of a second in the dash, half an inch in the upward jump, two inches in the broad jump, and forty feet in the ball throw, four and a half years later it was one and a half seconds, four and a half inches, two feet, and nearly seventy feet, respectively. With each passing year after age 13, the girls showed an actual loss in some abilities, presumably because their interests had become social, and they were far more anxious to attract boys than to compete with them.

It is only recently that people have realized the extreme importance of size, strength, and athletic ability, especially for boys, in the determination of social status among children and adolescents. American culture

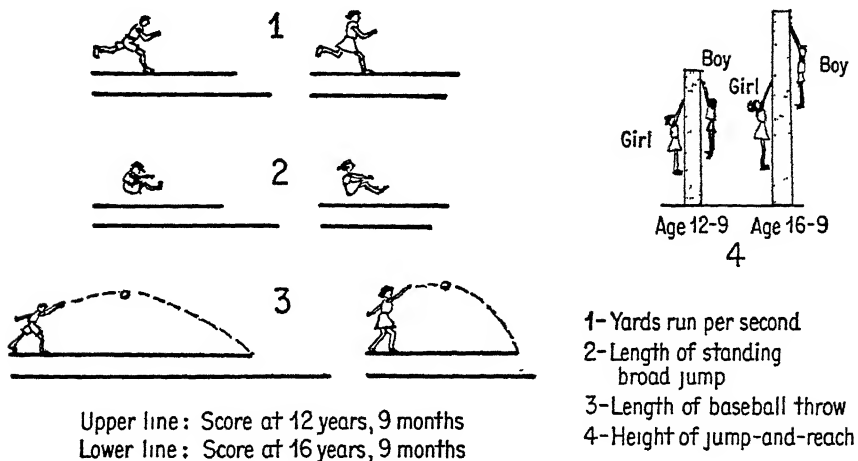


Fig 36. Changes in Four Athletic Skills

Based on figures in A. Espenschied, "Motor Performance in Adolescence," *Monographs of the Society for Research in Child Development*, Vol. V, No. 2, 1940

puts a high premium upon sheer physical superiority. It is not surprising, therefore, that a big, strong, athletic boy feels satisfied with himself and finds himself able to achieve popularity and admiration without any particular effort. The race has been won for him, and he can relax. The path to social success is therefore smoothed for him and, unless there is some extreme maladjustment either at home or in his schoolwork, he will be a popular member of adolescent society. The short, slender, weak-muscled boy of frail build, who cannot meet the competition of his peers, is forced into an uncomfortable position because the clearest road to popularity, through outstanding athletic success, is closed to him. To this situation he may make a number of responses. He may withdraw completely from competition, form perhaps one or two friendships with other noncompetitors, and become a spectator of the life that rushes past him. He may so resent

his inferiority that he becomes bitter and as verbally aggressive as he dares to be. Or he may seek a compensation by becoming a buffoon—which gets him attention and sometimes admiration, by gaining academic success—which gets him occasional admiration and very little attention from his age-mates, or by fawning upon the bigger boys, trying to pick up a few pale rays of reflected glory as a hanger-on. He may become sufficiently absorbed and sufficiently successful in the school chorus, on the school newspaper, or in school politics to forget almost that he will never be a football hero.

Sometimes a restricted kind of athletic success can be achieved by a frail, underdeveloped boy, or even by a tubby, fat one, if the school's athletic program is wide enough. Thus, anyone can learn to swim, and both the slender and the overweight lad, or lassie for that matter, have natural buoyancy as compared to the heavily muscled mesomorph who cannot float. The small, slight boy can gain admiration as a diver, especially as the springboard will throw his 100 pounds much higher than it will throw the 180 pounds of a big boy, and will thus give him more chance to do something spectacular and attention-getting. The plunge gives the overweight boy his chance, because the distance an individual can go is directly proportional to weight, once he has mastered the technique of hitting the water at the right angle. If a boy is not too small there is a chance that he can play shortstop on the baseball team, to be sure, a long reach is desirable, but at the high school level of performance, its lack can be compensated for by extra agility. If a boy is tall but too slender for the rougher sports, he may succeed either in tennis, in which his extra leverage will offset his lack of strength, or in fencing, because he has an unusually long reach and lunge but presents a narrow target. The one sport in which one small boy in a school is definitely in demand is rowing—and the smaller the coxswain the better. Unless a boy has some crippled condition or a heart deficiency that prevents even mild exercise, he can find something in which he excels, provided the offerings of the school are sufficiently varied. A step in the right direction has been made by organizing separate school teams in basketball, football, and baseball on the basis of weight. A boy can therefore become a star quarterback on the hundred-pound team, have the fun of playing, and achieve a moderate amount of respect. Of course, he would rather be on the A squad with the biggest boys, but success on the E squad provides a not-too-unsatisfying compromise. What has been said of boys may equally well be applied to girls who wish to achieve athletic success. It is no accident that most outstanding feminine divers are small, they cannot race against long-limbed girls, but they have excellent success in diving. However, many small, weak girls need no compensation, because "weakness" is an accepted and even admired feminine characteristic. All

a girl has to do is to play up being "helpless" and she can achieve popularity among boys—provided she is a likable person, in short, her lack of strength makes her boy friends feel bigger and stronger than they are and flatters their masculine ego because they have someone to "protect." The small, weak boy has no such comfortable retreat open to him.

One investigator of strength during adolescence compared numerous estimates and measures of emotional adjustment, personality, and social status for the ten strongest boys and the ten weakest⁴. Five of the former occupied positions of popularity and high prestige among their age-mates, four showed a satisfactory status, and only one was unpopular. Six showed excellent emotional adjustment, three were about average, and one had several emotional problems. They were all in good health and all were successful athletes. The ten weakest boys present a marked contrast. All had relatively poor health. No one belonged to any athletic team. Six were so shy and unsure of themselves that they were practically isolated from their fellows and had no social status at all. Four were a bit more assertive but did not succeed in achieving more than a slight degree of prestige, which they were unable to maintain as they grew older. Over the six years of the study, only one showed a consistently good emotional adjustment, three were about average but with evidence of some tension, and the remaining six were markedly maladjusted emotionally.

There is thus evidence that mere size and strength form one important basis for adequate social and emotional adjustment. Naturally, as in any comparative situation, some individuals must occupy positions at the bottom of the series, but if teachers and parents are aware of this possible source of difficulty, they may be able to minimize the effects upon personality and to guide the smaller boys away from destructive expressions of aggression on the one hand, and, on the other, into such compensatory activities as may be open to them, so that they too may find a place in the sun of their age-mates' admiration.

Summary

In general, boys and girls tend to be about equally strong during childhood, but with the coming of adolescence, the differences in favor of the boys begin to appear. There is great prestige value in strength for a boy, but none whatever for a girl. Boys show increasing strength and skill with every passing year, whereas girls show either a failure to gain or an actual decrease. If the school's program of sports is sufficiently wide, almost every adolescent who wants to be successful in such fields can find something that he can do well.

⁴ Jones, "Motor Performance and Growth . . ." *loc cit*

References for Further Reading

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Other Texts

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5

Physiological Growth

While the numerous changes already described in bone and muscles are in progress, other developments are taking place in the circulatory, digestive, respiratory, neural, and glandular systems of the body. Many of these changes are of vital importance in conditioning the behavior of the individual boy or girl.

Growth in Circulatory, Respiratory, Digestive, and Neural Systems

Circulatory System: The heart has its own growth rate, as do the other organs of the body. At age 6, it is four to five times as heavy as at birth, at 12, it is seven times as heavy, and at 18, it is twelve times as heavy. During the years of adolescence, the weight of the heart nearly doubles. The size of the transverse diameter of the heart is shown in Figure 37. In childhood, boys' hearts are a little larger than girls', from age 9 to 13, girls' are larger, from 13 on, boys' hearts grow rapidly, while girls' grow very slowly and not much more. The veins and arteries do not increase in size at the same rate that the heart does. Before adolescence, they have already reached a more nearly adult size than has the heart, and they grow more slowly than it does during the early years of adolescence. Thus, during childhood a small heart pumps blood through relatively large arteries and veins, but during adolescence, a large heart pumps blood through relatively small blood vessels. This condition may impose strain upon the pump for a few years, especially among rapidly growing boys.

Changes in both the size and the tension of the arteries are reflected in measures of blood pressure. From childhood to late adolescence the blood pressure rises steadily from 80 to 85 millimeters at age 6 to age 17, when it levels off at 110–120 for boys and 100–105 for girls, as indicated in Figure 38. Sex differences up to age 10 are not significant. From age 10 to 13, girls show a slightly higher average than boys. After age 13, however, the average blood pressure for boys tends to rise above that for girls, and after 16 there is a noticeable difference, because the boys continue to show an increase,

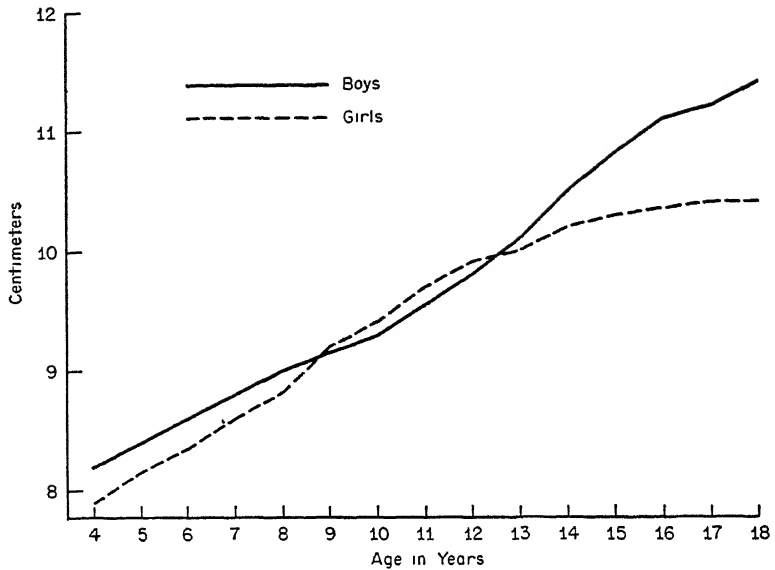


Fig 37 Growth in the Transverse Diameter of the Heart

Based on figures in M. M. Maresh, "Growth of the Heart Related to Bodily Growth during Childhood and Adolescence," *Journal of Pediatrics*, 2: 382-404, 1948



Fig 38 Systolic Blood Pressure during Adolescence

Based on N. W. Shock, "Basal Blood Pressure and Pulse Rate in Adolescents," *American Journal of Diseases of Children*, 68: 16-22, 1944

while the pressure of the girls decreases until about age 20, when both sexes have reached their normal adult level.

In contrast to blood pressure, the average pulse rate decreases with age for both sexes, but the average for girls is at all ages several beats above that of boys. This development is shown in Figure 39a. The difference between the two sexes becomes even more marked if the pulse rate is taken one minute after a prescribed unit of exercise (Figure 39b). In this second comparison, the girls' hearts are consistently about 20 beats above the boys'.

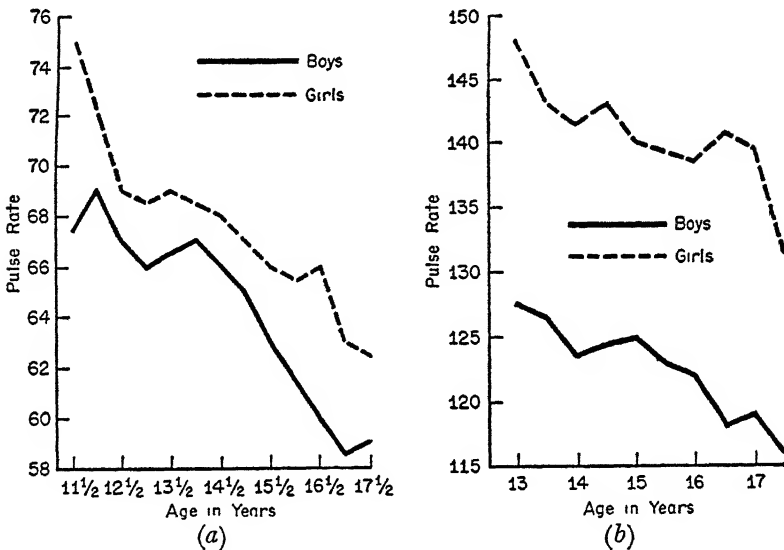


Fig 39 *Pulse Rate during Adolescence*

N. W. Shock, "Physiological Changes in Adolescence," *Forty-third Yearbook of the National Society for the Study of Education*, 1 59, 66, 1944. Used by permission of the publishers.

Physiological maturity has a marked effect upon both blood pressure and pulse rate. The changes may be seen most easily in girls, since their first menstrual period affords conclusive evidence of maturity at a particular time, whereas there is no such single criterion for boys. Figure 40 shows the results for fifty girls, tested every six months for many years, for both blood pressure and pulse rate. The scale for reading the former curve is at the right of the figure, that for the latter is at the left. When the data are tabulated with reference to each girl's first period and without respect to chronological age, it can be seen at once that blood pressure rose sharply during the three years before puberty and for six months thereafter, and then settled to a new level at about 106. In contrast, the pulse rate, which had been climbing irregularly but rapidly for the years just preceding the first menstrual period, fell off sharply and steadily for the next six years.

Physiological maturity thus operated to stabilize the upward trend of blood pressure and to reverse that of pulse rate

Respiratory System During childhood the lungs grow slowly, but in early adolescence they increase rapidly in size, especially among boys. Girls have smaller lungs, and most of them do not develop their capacity through

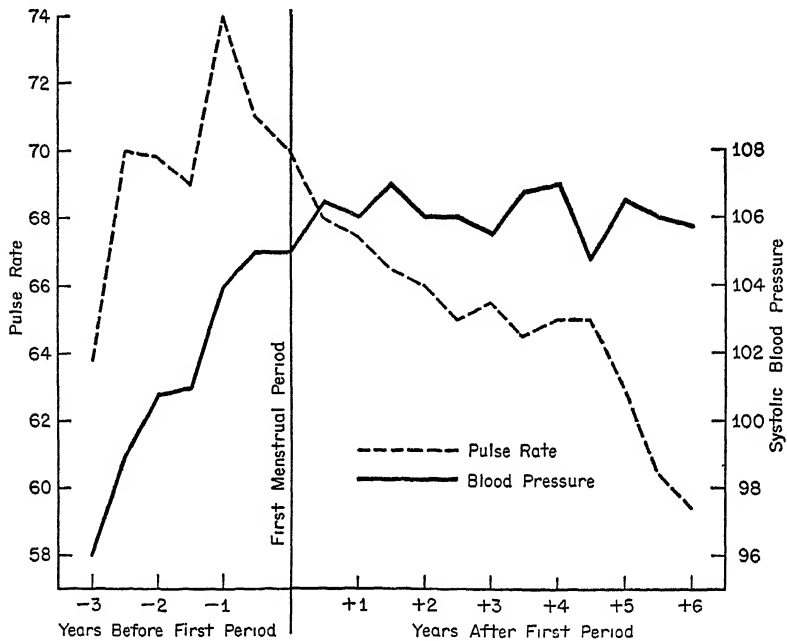


Fig 40. *Systolic Blood Pressure and Pulse Rate of Girls before and after Puberty*

From Shock, "Physiological Changes in Adolescence," p 71 Used by permission of the publishers

constant indulgence in active games. It is difficult to obtain a direct measure of lung capacity, but the general development of the period is reflected in the amount of air that one draws in and expels with each breath. Figure 41 gives curves for both boys and girls from ages 12 to 18, plus figures for young adults between the ages of twenty-six and thirty-five.

In general, adolescent lungs are quite capable of handling any burden that is likely to be put upon them. Although they have not yet reached adult volume, they will develop in proportion to the demands of the organism. Except for actual disease (mainly tuberculosis), they are not likely to become abnormal.

Results from recent studies on the reaction of lungs and heart to strenuous exercise indicate that immediately after exercise the amount of oxygen

breathed is increased to seven or eight times the amount required for maintaining normal vital processes when the individual is in a state of complete relaxation. Recovery of normal breathing for boys of fourteen took only fifteen to twenty minutes. Some adults, however, needed as long as three hours to reach the same degree of recovery after the same amount of exercise. These results reflect the great vitality of adolescence.

Digestive System. During adolescence the organs of digestion undergo considerable growth. The stomach becomes longer and increases in capacity. Because of the rapid growth rate in the size of the body, the adolescent needs

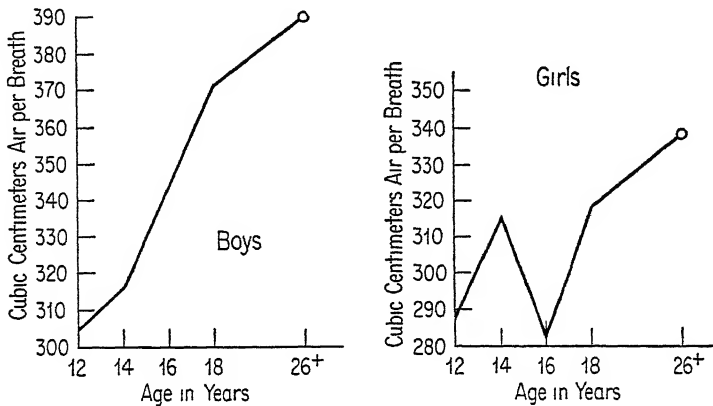


Fig. 41. *Volume of Air Breathed When Individual Is at Rest*

Based on N. W. Shock and M. H. Soley, "Average Values for Basal Respiratory Functions in Adolescents and Adults," *Journal of Nutrition*, 18: 143-153, 1939.

more nourishment than formerly, and because of the enlarged capacity of his stomach, he craves more food. The net result is usually a tremendous appetite for three or four years. In some adolescents the perpetually hungry condition is so marked that it seems practically impossible for them ever to get enough to eat, although they consume more food in twenty-four hours than adults need in twice that time.

Digestive difficulties during adolescence are doubtless due partly to mere overloading of the stomach but partly to actual deficiencies of vitamins or calcium. Furthermore, the boy or girl usually begins to eat meals away from home during this period. Adolescents can be trusted to make a lunch of hot dogs, chili con carne, or hamburgers and French fries, washed down with Coca-Colas or milk shakes, and followed by banana splits or strawberry waffles. It requires the entire period of adolescence for most people to learn to eat a reasonably balanced meal on their own initiative—if they ever do learn. In many adolescent groups, it is considered a social virtue to eat

absurd combinations of food at highly unconventional and irregular hours. Such reactions may contribute to emancipation from home control and to status among one's peers, but they also contribute to stomach-aches and other digestive disturbances.

Nervous System The number of different fibers in the nervous system is practically complete at birth, but not all neural functions are present at that time. So far as gross size is concerned, the nervous system develops very little during adolescence. What growth there is, then, is confined to further development of the fibers, in both length and thickness, and to further contacts among them. It is probable that the complexity of the brain—that is, the total number of contacts between fibers—is greatly increased during the early years of adolescence.

The facts in regard to neural growth are, in any case, not as important to the teacher as the effects. The increased ability to think and, in particular, to generalize is probably the result of the increased complexity of the brain. To be sure, part of the ability to think and reason comes from the individual experiences each person has as he grows older. It is, moreover, not true that children are completely without ability to reason. Their capacities are doubtless underestimated because they sometimes reach erroneous results through their lack of knowledge. The impulse to think in more general terms is perhaps due also to the need for such thinking, the physical, emotional, and social changes during adolescence precipitate problems to which the boy or girl wants an answer. Presumably, the further development of the brain furnishes the physiological basis for the more complex forms of thinking in which the adolescent indulges. Indeed, an outstanding characteristic of adolescent boys and girls is their spontaneous joy in mental activity—even if the topics thought about are not always those presented in the curriculum.

The Glandular System

The Duct Glands The human body contains both duct and ductless—or endocrine—glands. Although important enough in the total economy of the organism the former are of relatively little importance for the present discussion, since their action has few psychological concomitants. The only points that will be noted in regard to them are the increase at adolescence in the activity of the sweat glands and the frequent failure of the oil glands to drain properly. The oil glands, although sometimes discharging altogether too much oil and producing a greasy appearance, more often fail to drain adequately because for a few years the ducts are too small. The normal discharge therefore hardens, a speck of dirt gets into it during the hardening, and a blackhead appears. The sweat glands also produce distressing symptoms, both directly through perspiration and indirectly

through the development of body odors. The boy is upset because his shirt sticks to him at the slightest provocation and is acutely embarrassed when the perspiration on his hands stains the dress of the girl he dances with. With the aid of salves and all manner of deodorants, the adolescent girl carries on a constant fight against perspiration, and especially during her menstrual periods against body odor as well. Neither sex is altogether successful because the glands are both active and sensitive. Not only warmth and exercise produce undesired amounts of perspiration, any emotional disturbance is equally fatal. When a teacher sees a luckless student begin to perspire, she would do well to release him temporarily from whatever academic effort he is involved in. If his attention is being divided between the telltale moisture on his forehead and the intricacies of an imperfect subjunctive, he might as well be excused.

The Ductless Glands: The endocrine, or ductless glands merit discussion because of their effects, direct or indirect, upon both physical condition and emotional life. First as to their names and locations. They are called the pineal, pituitary, thyroid, parathyroid, thymus, adrenal, pancreas, ovaries, and testes. The pineal and pituitary are located in the base of the brain, the thyroid and parathyroid in the front of the throat; the thymus is in the chest, the adrenals¹ and pancreas² are in the abdomen. The ovaries and testes are parts of the sexual organs.

Each gland has its own rhythm of growth, some of which are illustrated in Figure 42. In each case the figures show the per cent the gland is at each age of its size at age 20. The thymus develops rapidly in childhood, at thirteen it is 250 per cent heavier than at birth and 150 per cent heavier than in adult life. The thyroid, parathyroids, and pituitary develop at a fairly regular rate from birth to maturity. The pineal gland grows rapidly and reaches 90 per cent of its adult weight before a child is ten years old. The adrenals (also called suprarenals) lose weight during the first year of life and do not regain their size at birth until the middle years of adolescence, thereafter, they grow quickly to their adult weight.

Each of these glands has its specific function in the chemistry of the body. Thus the pituitary controls growth in general, and the increased activity of its anterior lobe is the trigger that sets off the great physical changes of adolescence. It also has some influence in stimulating the appearance of the secondary sexual characteristics. If the pituitary is overactive from birth it will produce a giant, if underactive from birth, a dwarf. When the gland becomes abnormal during childhood or adolescence the person affected develops huge hands, big feet, and coarse features. Puberty is sometimes advanced—that is, it occurs before age 9 in girls or 11 in boys—

¹ The adrenals are located in the upper tip of the kidneys.

² The Isles of Langerhans—which are the actual source of the endocrine excretion—are situated in the lower, middle area of the pancreas.

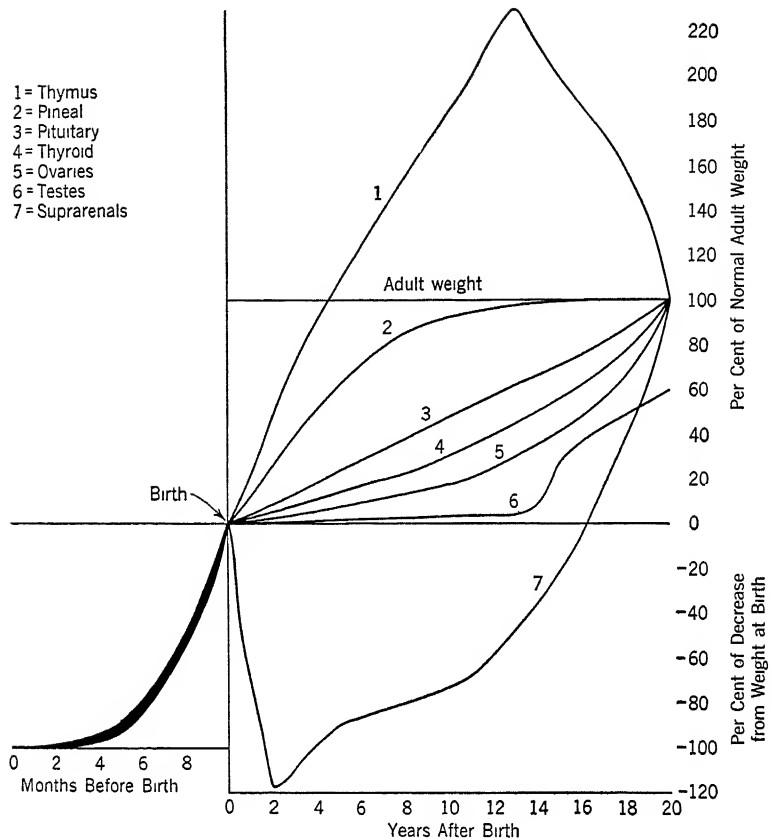


Fig 42 Growth Rates for Certain Glands

The curve for prenatal growth is to be found on p 263 of C M Jackson, "Some Aspects of Form and Growth," in L Carmichael (ed), *Manual of Child Psychology*, John Wiley & Sons, Inc., 1946

The separate curves for growth after birth come from J H Harris, et al, *The Measurement of Man*, University of Minnesota Press, 1930, p 200

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or retarded until after age 17 in either sex, because the pituitary has become hyperactive sooner or later than usual, although there may be other reasons. There is at least one recorded case of a girl who began to menstruate at 7 months. By the time she was six years old she had a skeletal age of $13\frac{1}{2}$ and the figure of an adolescent girl³. Either advanced or retarded puberty presents problems to both parents and teachers. A nine-year-old girl or an eleven-year-old boy is not yet ready intellectually, socially, or emotionally to become an adolescent, and the child's associates

³ W W Greulich and S I Pyle, *Radiographic Atlas of Skeletal Development of the Hand and Wrist*, Stanford University Press, 1950, p 9

are not yet ready to understand what has happened to him. Nor can the maturity be kept secret, even if this were wholly desirable, because the girl's breasts will soon develop, as will the boy's genitalia, and their voices will become lower, especially the boy's. These children then become objects of great curiosity and possible ridicule among their peers. A delayed adolescence is almost as bad, although the problems are different. The child fails to keep up with his group in any respect, except intellectually. In his schoolwork he may be successful, but outside the classroom he is like a pygmy among giants, and his social maladjustment is practically inevitable.

The adrenal glands produce two secretions. One affects the development of masculine secondary sexual characteristics, while the other acts in times of emotional stress as a chemical whip on all the nerve centers of the body. The action of this second secretion will be described in more detail in another chapter.

The parathyroids control the absorption of calcium, a chemical necessary for the development of bone, for the nourishment of nerves, and for the clotting of the blood. These glands are tiny but absolutely essential to life. If they are accidentally removed during a goiter operation, the patient dies within a few days. The thymus and pineal glands and the pancreas also contribute to growth, to the assimilation of chemical materials, and to the regulation of various bodily functions, but their work has few if any mental or emotional accompaniments.

The thyroid gland regulates the rate at which metabolism takes place within the body. If the gland is not sufficiently active, an individual is slow, lethargic, and listless because all his bodily processes are retarded. His hair and nails are coarse and brittle, and his skin is thick and leathery. Usually, he is overweight and is likely to suffer from a chronic constipation. If medication by a simple taking of sheep's thyroid to compensate for the internal deficiency is begun soon enough, the individual usually becomes nearly, if not entirely, normal. An overactive thyroid causes the bodily functions to proceed too quickly. The heart beats too fast, the digestion is too rapid, and the nerves are overstimulated. The individual is too easily excited, too emotional, too quickly fatigued, too irritable. Usually he is underweight. The thyroid is a chronic troublemaker for adolescent girls, especially in the Middle West. In some sections, if iodine is not put into the drinking water, the percentage of girls with a thyroid enlargement, usually a "puberty goiter," runs as high as 30.⁴

Since the thyroid is mainly responsible for the rate at which an organism is functioning, one can estimate the adequacy of thyroid action by measuring the rate at which some fundamental bodily activity is progressing. The commonest approach to the problem is to determine the amount of oxygen used by the lungs in a given amount of time, under carefully

⁴ J. S. Richardson, "The Endocrines in Adolescence," *Practitioner*, 162:280-296, 1949.

controlled conditions ⁵ If more than an average amount of oxygen is needed, the organism is running too fast, chiefly because it is being overstimulated by too much secretion from the thyroid, if less than an average amount of oxygen is needed, the organism is running too slowly The average consumption of oxygen decreases from age 2 onward, the decrease being rapid at first but becoming slower during adolescence, with the boys maintaining a higher metabolic rate at all ages than girls.

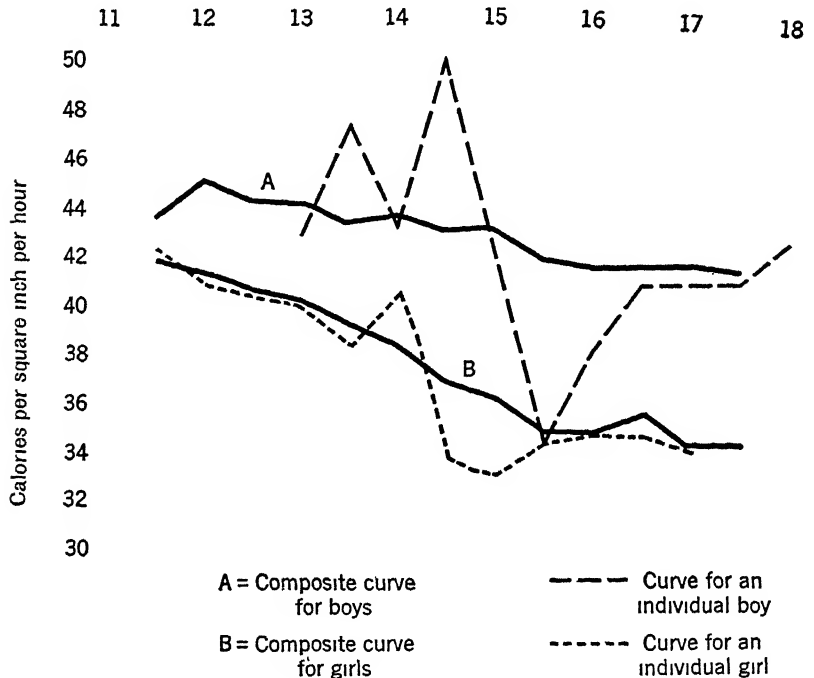


Fig 43 *Basal Metabolism Rates during Adolescence*

From Shock, "Physiological Changes in Adolescence," pp 62, 63 Used by permission of the publishers

Some interesting results appear in Figure 43 The heavy lines give the curves for metabolic rate among 50 boys and 50 girls tested at six-month intervals from eleven and a half to eighteen years of age, the two broken lines show the record for two individuals in the group The individual curves show marked rises just before or at puberty, followed by conspicuous decreases, with a subsequent recovery and establishment at an adult level The irregular development shown by the individual curves almost always

⁵ The individual is supposed to have been lying down and to have eaten nothing for twelve hours Usually the test is made about 7 A M while the person is still in bed

takes place for both boys and girls, but since puberty begins at different times for different individuals, the sudden increases and decreases cancel themselves out in the construction of a group curve, because when one thirteen-year-old, prepubertal child's curve is rising sharply another thirteen-year-old, postpubertal's is falling rapidly. Therefore, when results from a number of cases are combined, the group curves appear smooth

During infancy and early childhood, the ovaries grow a little but very slowly, reaching about 10 per cent of their adult weight by age 8. They begin to grow a little more rapidly and gain half their adult weight by age 16. Most of the remaining weight is added during the next four years. The boy's testes grow much more slowly. They have only about 3 per cent of their adult weight at age 3, and by age 10 they have increased to only 10 per cent. This curve has a definitely concave shape because of the long period of extremely slow growth during childhood. After age 10 the rate of growth increases up to age 16. Thereafter it slows down again, and even at age 20 the glands have reached only 60 per cent of the adult weight.

The teacher who is alert to the situation will find in her classes many children who need medical attention because of glandular malfunctioning. Sluggishness, sleepiness, overweight, leathery skin, failure to grow, early appearance of secondary sex characteristics, irritability, excitability, jumpiness, inattention, fainting, painful menstruation, fast pulse, and protuberant eyeballs are all danger signals that suggest glandular involvement. Children showing such symptoms should be sent at once to the school doctor.

Sexual Maturity

The maturing of the sex glands is the most important single development of the adolescent years. Indeed, puberty consists essentially in this maturation. The mere physical ability to produce offspring is, however, not nearly as significant at the moment as the added depths and nuances of emotional and social life that develop along with puberty. These emotional developments will be discussed at length in a later chapter. The present discussion will be limited to a description of the physiological changes and the reaction of adolescents to them.

The Sex Organs. Before beginning this discussion it seems advisable to present a brief statement concerning normal growth of the organs from birth to maturity.

Figure 44 traces the growth of the uterus and the penis.⁶ The uterus at birth is over 45 per cent of its adult length. Almost at once, however, it shrinks and does not recover its size at birth until the girl is five years old.

⁶ Students who need diagrams of the male or female genitalia in order to follow the discussions will find excellent ones in A. Scheinfeld, *Women and Men*, Harcourt, Brace and Company, 1943, pp. 111 and 133.

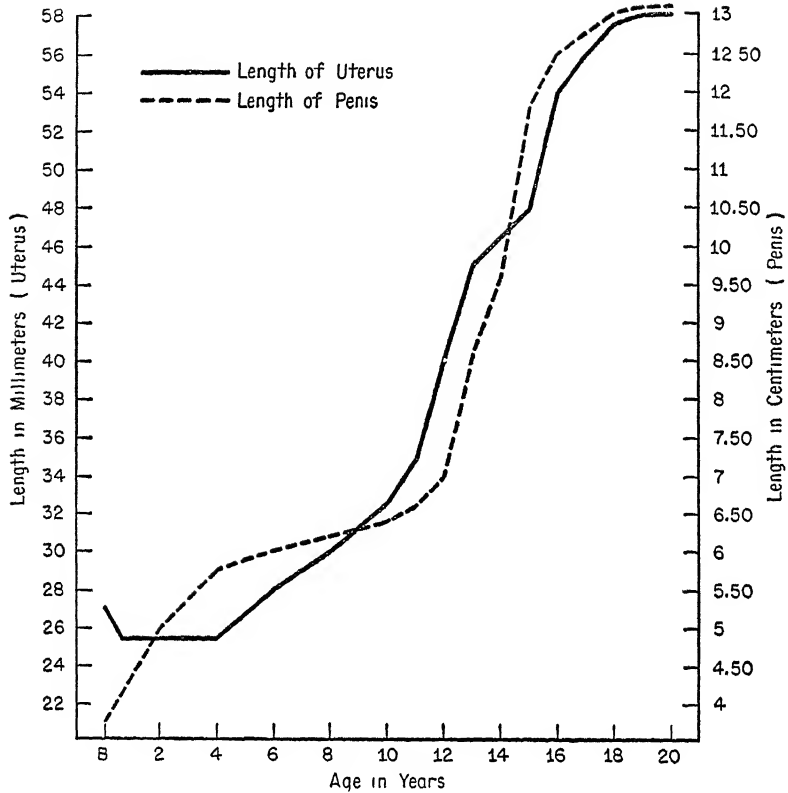


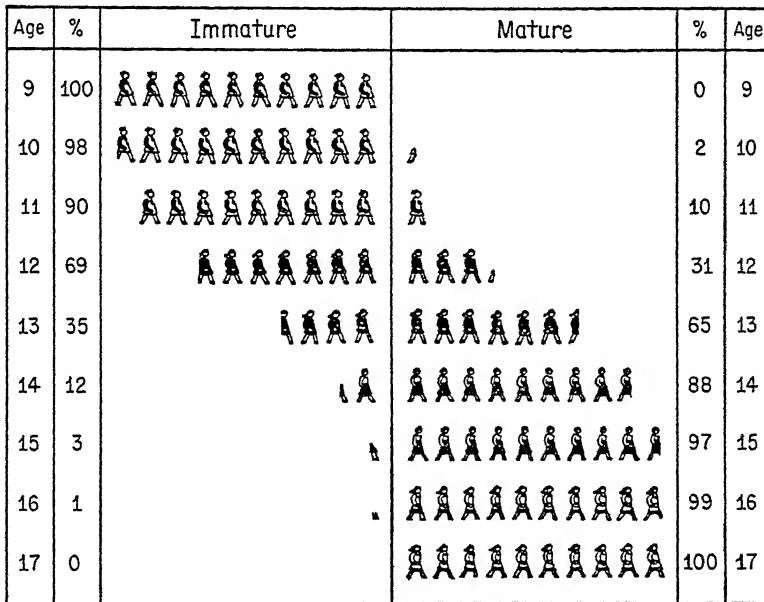
Fig 44 Growth of Sex Organs

Based on figures in J P Schaefer (ed), *Morris' Human Anatomy*, 10th ed, The Blakiston Company, 1942, p 196, and W A Schonfeld and G W Beeke, "Normal Growth and Variability of the Male Genitalia from Birth to Maturity," *Journal of Urology*, 48 755-777, 1942

It grows slowly during childhood and then rapidly in preadolescence and adolescence, reaching its adult weight by age 20. The penis grows quite rapidly during the first four years of life, increasing from less than a third of its eventual length to nearly a half. It then grows slowly during childhood. At age 11 it has reached only half of its adult length. Growth then accelerates, especially from ages 14 to 17, after which the rate becomes slower, continuing until a boy has become a young man. Its growth is not quite complete at age 20.

Age of Sexual Maturity Girls show normally a variation in the age of first menstruation from 10 to 17. Those who mature before age 12 are considered precocious and those who mature at or after age 15 as more or less retarded. Over 75 per cent of girls have their first period at twelve, thirteen, or fourteen. The total distribution of menstrual ages, based upon

a combination of many studies, appears in Figure 45. The percentage of girls who menstruated for the first time at or before nine was so small as to be nearer to zero than to one, only 2 per cent became mature at age 10 and 8 per cent at 11. Thereafter, the proportion increased rapidly. The cumulative per cent of sexually mature girls at the end of the twelfth, thir-



One figure equals 10 per cent

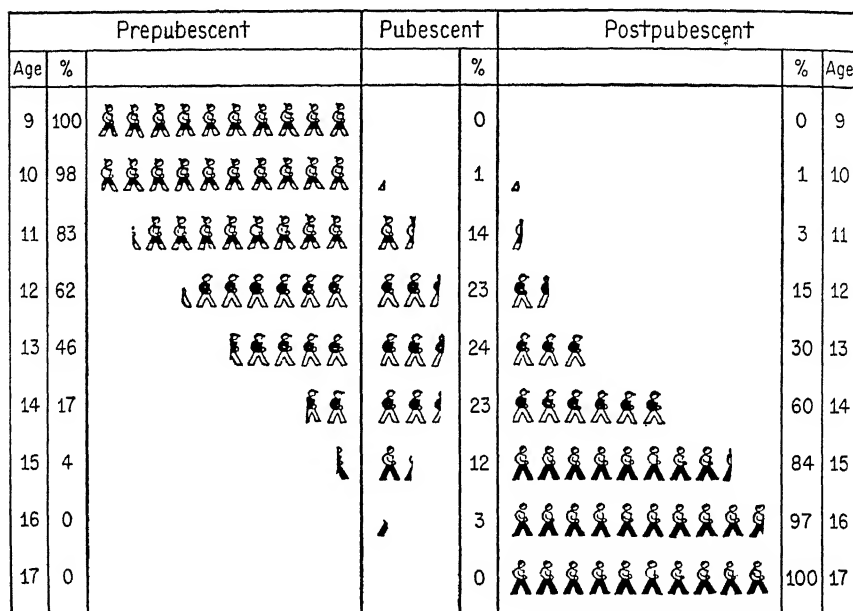
Fig. 45 Age of Maturity for Girls

Based on data in R. G. Barker and C. P. Stone, "On the Relation between Menarcheal Age and Certain Aspects of Personality, Interests, and Physique in College Women," *Journal of Genetic Psychology and Pedagogical Seminary*, 45: 121-135, 1934, and "Physical Development in Relation to Menarcheal Age in College Women," *Human Biology*, 8: 198-222, 1936, E. T. Engle and M. C. Shelesnyak, "First Menstruation and Subsequent Menstrual Cycles of Pubertal Girls," *Human Biology*, 6: 431-433, 1934, H. N. Gould and M. R. Gould, "Age at First Menstruation in Mothers and Daughters," *Journal of the American Medical Association*, 98: 1349-1352, 1932 (material for daughters only was used), M. L. Revmert, "Relationships between Menarcheal Age, Behavior Disorders, and Intelligence," *Character and Personality*, 8: 292-300, 1940.

teenth, and fourteenth years was, respectively, 31, 65, and 88. At ages 15 or 16 the remaining 12 per cent had their first period.

Since boys do not have any single, easily determined evidence of sexual maturity, such as girls do, and since they normally take at least six months and often as long as two years to pass from a clearly immature to a clearly mature level, they may best be grouped into three developmental stages: prepubescence, pubescence, and postpubescence. The percentages in each of these groups from ages 10 to 18 are shown in Figure 46. Those in the

first group are still children, their organs are small, there is no pubic hair, and their voices are still high. Boys in the second group show some but not all of the signs of maturity, they are in the process of becoming mature. Those in the third group show all the indications of male sexual adulthood, although their organs will continue to grow in size until about age 25. An onset of pubescence before age 12 in boys may be considered precocious. Twelve, thirteen, and fourteen are the ages at which 70 per cent of boys



One figure equals 10 per cent

Fig 46 Age of Maturity for Boys

Based on data in H. G. Richey, "The Relation of Accelerated, Normal, and Retarded Puberty to the Height and Weight of School Children," *Monographs of the Society for Research in Child Development*, Vol II, no 1, 1937, and Dimock, *Rediscovering the Adolescent*, Association Press, 1937, pp 209-211

become pubescent. Few boys reach the postpubescent stage before thirteen and only 30 per cent before fourteen. The commonest ages are fourteen and fifteen, during which another 54 per cent reach full maturity. The last 16 per cent arrive at that stage by the end of their seventeenth year. In Figure 46, 15 per cent show an early pubescence and 15 per cent a delayed one.

It will be noted that boys reach maturity about two years later than girls. Consequently, there is a period during which the proportion of mature girls is far larger than the proportion of mature boys. As a result, girls are more sex-conscious than boys of their own age. There is some basis

for the popular observation that a girl of thirteen is already a young lady, while a lad of thirteen is still a small boy.

The age of sexual maturity is related to height, weight, and skeletal development. Those who mature earliest are, from age 6, taller, heavier, and more advanced in skeletal development than those who mature later. Figure 47 shows some illustrative results in weight for groups of boys and girls who matured at different ages. On the chart a dot has been placed to

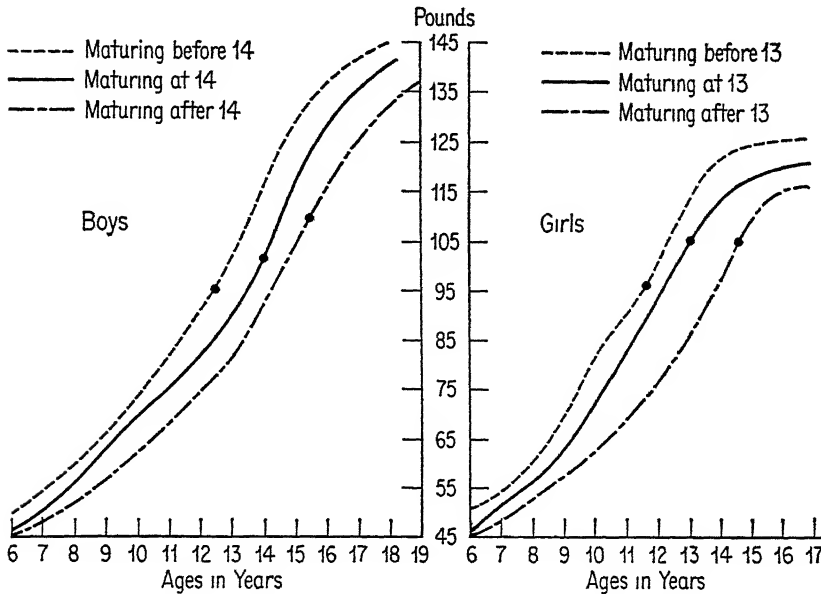


Fig 47 *Weight of Boys and Girls Maturing at Different Ages*

From Richev, *loc cit*, pp 22, 30. Used by permission of the National Research Council.

indicate the approximate age of puberty for each group. Among boys the advent of puberty seems to accelerate growth. For the girls, however, the onset of menstruation marks the end rather than the beginning of rapid growth.

The age of maturity is influenced somewhat by race, family, climate, and socioeconomic status, the last being operative presumably through differences in nutrition at different economic levels. These various influences combine in the case of any one individual or group of individuals. In general, Negroes mature earlier than white people, southern groups earlier than northern, the children of professional men earlier than those of day laborers, and the daughters of mothers who matured early sooner than the daughters

of mothers who matured late.⁷ One has to be cautious, however, in applying such general principles to any given case. Thus, for instance, Negro girls in the West Indies mature at an average age of 14 years.⁸ In the southern states, the average for Negro girls is 13 years and 8 months. In New York City the general average is 13, and for daughters of well-to-do Negroes, 12 years and 10 months—over a year below that of the same racial stock in the West Indies, and identical with the average for white girls living in New York City. Sometimes the various influences reinforce each other, but sometimes they cancel each other.

Secondary Sexual Characteristics The secondary characteristics for both sexes are often of similar type and vary only in the degree of development, as may be seen by comparison of the following lists

Boys	Girls
Growth of pubic hair	Growth of pubic hair
Growth of hair under arms	Growth of hair under arms
Heavy growth of hair on face	Light growth of hair on face
Heavy growth of hair on body	Light growth of hair on body
Eruption of second molars	Eruption of second molars
Growth of larynx	Slight growth of larynx
Change of voice	Moderate lowering of voice
Widening of shoulders	Widening of hips
Thickening of muscles	Slight thickening of muscles
Increase in perspiration	Increase in perspiration
Sometimes slight and temporary development around breast nipples	Development of breasts

The growth of pubic hair and of hair under the arms is about the same for both sexes. Facial and body hair are much heavier for boys, but the same developments appear in reduced form among girls as a light down upon the upper lip and on the forearms and lower leg. The voices of children are of much the same pitch, without respect to sex. Thus, in a study⁹ of seven- and eight-year-old children, the pitch for both boys and girls averaged close to middle C, about an octave above the average for adult males.

⁷ H. N. Gould and M. R. Gould, "Age of First Menstruation in Mothers and Daughters," *Journal of the American Medical Association*, 98:1349-1352, 1932.

⁸ N. Michelson, "Studies in Physical Development of Negroes. Onset of Puberty," *American Journal of Physical Anthropology*, 2:151-166, 1949.

⁹ G. Fairbanks, J. H. Wiley, and F. M. Lassman, "An Acoustical Study of Vocal Pitch in Seven- and Eight-Year-Old Boys," *Child Development*, 20:63-69, 1949, and G. Fairbanks, E. L. Herbert, and M. Hammond, "An Acoustical Study of Vocal Pitch in Seven- and Eight-Year-Old Girls," *Child Development*, 20:71-78, 1949.

A curious fact which emerged from this study was the appearance of "breaks" in the voices of both boys and girls, and of the same average number for members of both sexes. Change of voice usually begins during the fourteenth or fifteenth year with huskiness and lack of control in volume as the first symptoms. The larynx enlarges, and the boy's voice eventually becomes about an octave lower.¹⁰ Many boys experience no marked "breaks." Their voices gradually become lower and heavier without loss of control.¹¹ One of the writers knew a boy who sang soprano in a church choir until he was fourteen, then alto for two years, then tenor, and finally bass by the time he was twenty-one, but at no time did he lack the necessary control for singing. Only about half the boys studied have reported "breaks." The girl's voice shows only a moderate degree of lowering, but the childish treble disappears, and the timbre of the voice becomes heavier and richer.

Members of both sexes show a lengthening and thickening of the muscles, but this development is so marked in boys that it is often overlooked in girls. Boys become markedly broader in the shoulders, while girls become definitely wider in the hips. These changes contribute much to the characteristic outline of men and women. Some boys develop a temporary swelling under their nipples during their period of pubescence, but the condition does not last.

For girls the development of the breasts is the most important of the secondary changes. In one study of the rate of growth of the breasts, semi-annual examinations were made of girls between ages 8 and 15. The breasts developed from a bud to mature size in about three years, between ages 11 and 14. Thirty-eight per cent of the girls had small breasts, 28 per cent had large ones, and 34 per cent had breasts of medium size. In shape, 20 per cent were flat, 20 per cent were conical, and 60 per cent were round. The various outlines and percentage distributions are represented in Figure 48. In 54 per cent of the girls, the breasts began to develop before the pubic hair started to grow, in 32 per cent the hair appeared first, and in the remaining 14 per cent the two secondary characteristics appeared and developed together.

Reactions to Sexual Maturity The achievement of sexual maturity is of great importance to the boy or girl. It is also the source of some embarrassment. The boy's organs not only grow rapidly in size until he suspects they may show through his clothing, but seem to react without his volition. At night the boy is often distressed by dreams that seem to him highly indecent. He is practically certain to masturbate more or less, even if he does not, his nocturnal emissions may embarrass and frighten him. If he does not have frequent discharges, he may become uncomfortable

¹⁰ E. T. Curry, "Voice Changes in Male Adolescence," *Laryngoscope*, 56 795-805, 1946.

¹¹ C. P. Pedrey, "A Study of Voice Changes in Boys between the Ages of Eleven and Sixteen," *Speech Monographs*, 12 30-36, 1945.

from tension. Most boys require physical relief, which is usually obtained by a combination of masturbation and daydreams of girls.¹² At the beginning of the genital period, the physical stimulation is the more important element, but gradually the intellectual and emotional elements become sufficient for stimulation and fuse with the physical. Girls do not feel nearly as much need for release as boys do.

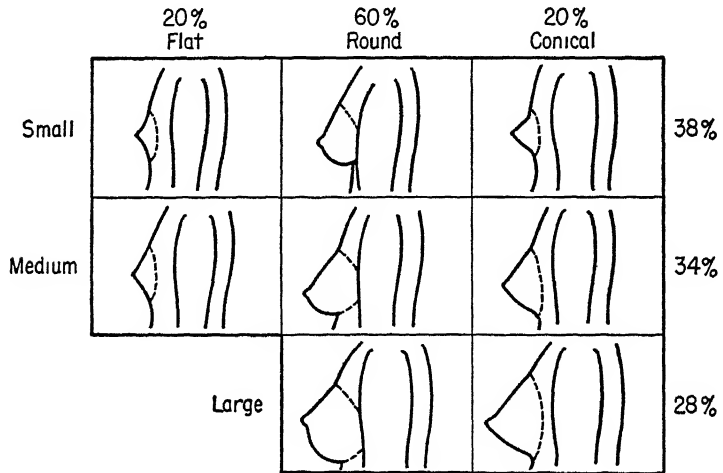


Fig 48 Growth of the Breasts

Based on E. L. Reynolds and J. V. Wines, "Individual Differences in Physical Changes Associated with Adolescent Girls," *American Journal of Diseases of Children*, 75: 329-350, 1948.

A boy experiences erections as a reaction to a wide variety of stimuli, some of which are not of obviously sexual character, such as sentimental music, riding in a car or on a train, swinging, or becoming generally excited, as at a football game, or frightened, as when on the way to battle. The commonest stimuli are conversation on sexual matters either with other boys or with girls, pictures of female nudity, pornographic pictures or books, daydreams, love scenes in moving pictures or in books, and dancing. Boys are much more easily stimulated than girls, in part because their organs are external, and in part because their mechanism has a hair-trigger reaction quite missing in girls. An erection, while sometimes disturbing to a boy, is also a source of pride as a sure sign of masculinity.

Single manifestations of masculinity may appear at any age from middle childhood to late adolescence—that is, from the end of elementary school till toward the end of high school. Evidence accumulated from personal interviews with 291 adolescent boys is summarized in Figure 49. The results

¹² F. B. Strain, *The Normal Sex Interest of Children*, Appleton-Century-Crofts, Inc., 1948, 210 pp.

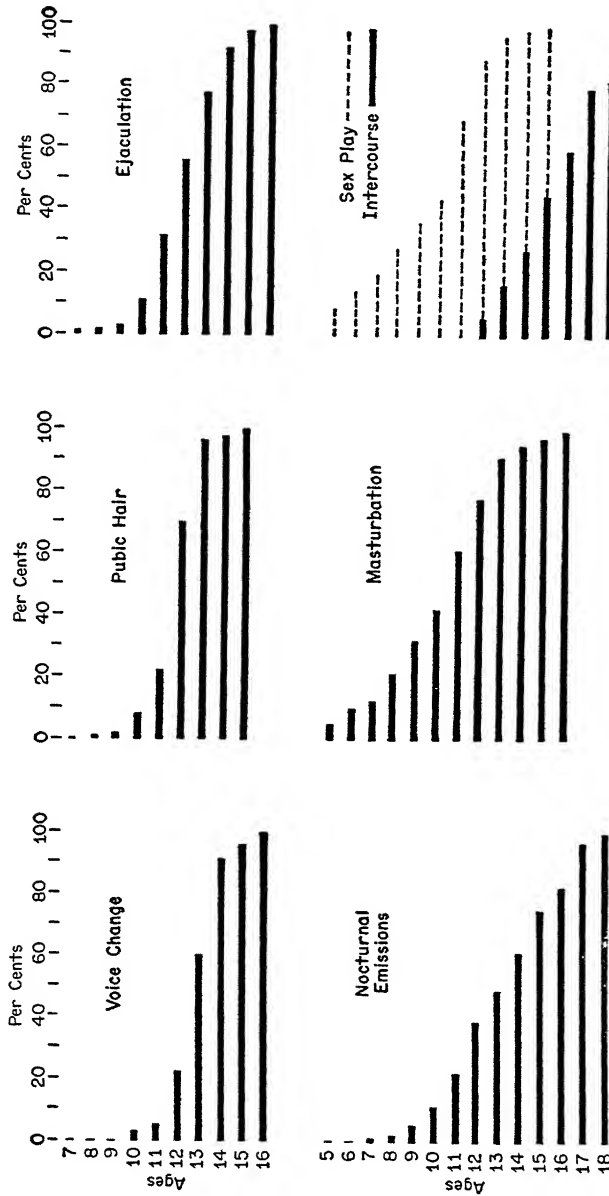


Fig 49 Age Distributions for Male Sexual Development

Based on G V Ranney, "The Sex Development of Boys," *American Journal of Psychology*, 56 217-233, and, for one distribution only, A C Kinsey, W B Pomeroy, and C E Martin, *Sexual Behavior of the Human Male*, W B. Saunders Company, 1948, p 175

show that a boy's voice may change, his nocturnal emissions begin, his ability to ejaculate develop, and his pubic hair appear as early as seven, eight, or nine years of age and as late as some age after sixteen. The percentage of boys having nocturnal emissions increases fairly regularly from ages 13 through 17, but some boys have not experienced emissions until 18 or 19.

Masturbation may begin in infancy and is practiced by a fourth of the boys by the time they are eight years old. By age 12, over three fourths of the boys masturbated, and by age 16, all of them. Since this sexual practice is so widespread, it cannot be called abnormal. So far as is known, the physiological results are either harmless or beneficial, the damage, if any, is emotional. Many boys suffer from feelings of shame and guilt, which often accompany the act, and are frightened half out of their wits by horrible predictions of insanity or impotence in later life. Unless the masturbation is excessive it does no harm provided a boy does not get the idea that he is abnormal. If the boy is not scolded or threatened or made to feel ashamed, he will outgrow the habit. The best single method of either prevention or cure is to keep a boy's life so full of so many interesting things that he has relatively little time for daydreaming and relatively little attention left over from other interests to become absorbed in any form of sexual activity. Sex play is common.¹³ It begins as early as four, and the percentage of boys indulging in some form of sex play increases with every year. By ten years, 45 per cent have had such experiences, and by fourteen the per cent has reached 100. The earliest reported attempts at intercourse were at age 12. By fifteen years of age, 45 per cent had at least tried to have intercourse. The percentage increased to 60 at sixteen and, in the sample studied, at least one such attempt had been made by 82 per cent of the boys before they were nineteen. Visits to prostitutes were reported as early as fifteen, and at least one such visit had been made by 40 per cent of the boys before their twentieth year. Adults are often shocked by the figures on sex play and sex experience among children and adolescents, but this attitude stems partly from a failure to realize that sexual interests are a normal part of life at all ages and partly from an adult conviction that these interests are "dirty." Each new study of the subject points more and more clearly to the natural spontaneity of such interests and activities and to their widespread occurrence at all ages.

Boys differ from each other as widely in the extent of their knowledge about sexual phenomena as they do in their sexual habits. Results are summarized in Figure 50. Some boys know about the origin of babies as early as five, but others do not learn until thirteen or fourteen. Knowledge

¹³ The facts in the rest of this paragraph are taken from A. C. Kinsey, W. B. Pomeroy, and C. E. Martin, *The Sexual Behavior of the Human Male*, W. B. Saunders Company, 1945, pp. 137, 141, and 175.

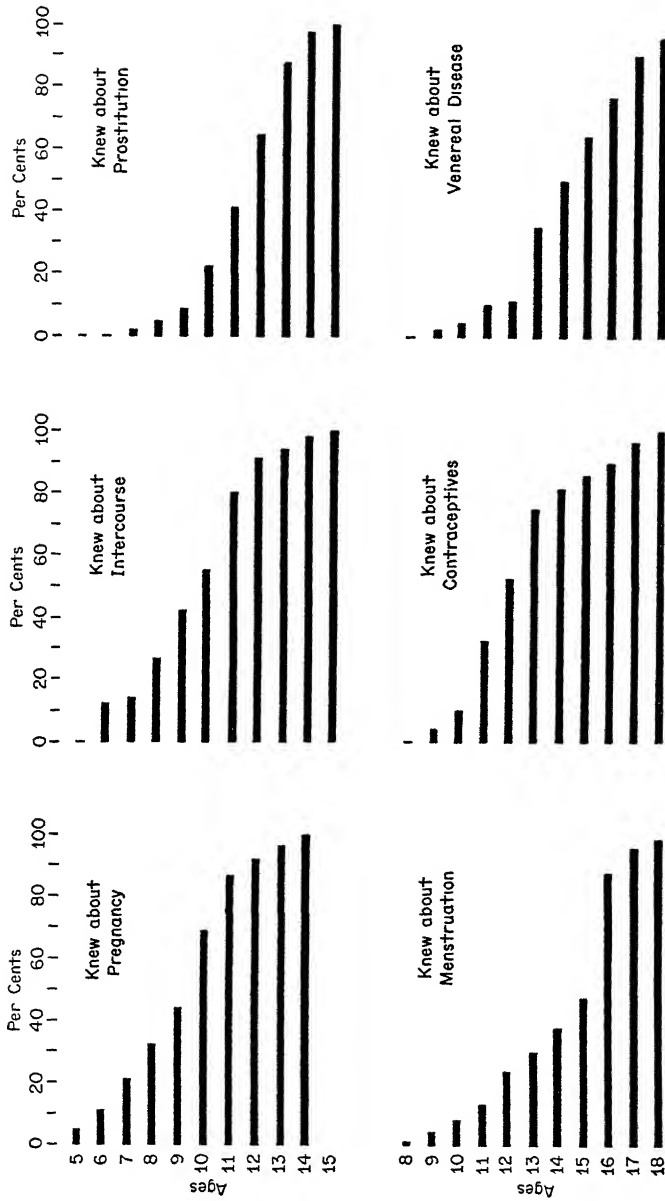


Fig. 50 Age Distributions for the Knowledge of Sexual Phenomena

Based on G. V. Ramsey, "The Sex Information of Young Boys," *American Journal of Orthopsychiatry*, 13: 347-352, 1943

of menstruation may be acquired as early as age 8, but as many as half the boys are not aware of it until after age 15. Since most girls are already mature at this age, there would seem to be a need for an earlier imparting of this item of information, otherwise boys are likely to be puzzled and curious about the behavior of girls during their monthly periods. Knowledge of prostitution may be acquired at a very early age, the fact that prostitutes exist is known to all or practically all boys by the time they are fifteen years old. Knowledge of venereal disease does not reach half the boys until they are fourteen, and even at eighteen it is not universal. In view of their experiences, this information should surely be provided in early adolescence. Information about contraceptives has been acquired by over half the boys of twelve, and by all of them at eighteen.

The average boy has perhaps a more pronounced emotional reaction to his maturity than the average girl, because he is more acutely and constantly aware of it. His organs are external. They are subject to the incidental pressure of such external objects as wearing apparel or bedclothes. He is forced to touch himself several times a day when he urinates. To himself, his sexual development seems obvious and uncontrollable. If he consults his friends about his difficulties, he receives chiefly smutty stories and misinformation, if he asks his father, he is often met with embarrassment and evasiveness, if he consults an older man, he is lucky if he is not sent to prostitutes, if, in desperation, he visits some quack, he gets frightened out of his wits. He cannot consult most of his teachers because they are unmarried women. Even his mother can tell him very little, she was never a boy, and by now she has reached a conservative, feminine middle age that is as likely to be horrified as to be helpful.

A girl's adolescence involves quite different kinds of strain and difficulty from those experienced by boys. A girl may receive a considerable emotional shock from her first menstruation, whether or not she has been warned of its arrival, since there is something understandably terrifying in a hemorrhage that cannot be stopped. Bleeding is so associated with unpleasantness that many girls can never dissociate this emotional tone from their menstrual periods, although the total amount of blood lost averages only a few tablespoonfuls. There are a few girls who become so badly disturbed emotionally during their periods that they are quite unlike themselves. Even after the periods are established, their recurrence taken for granted, and any initial discomfort forgotten, girls may experience what boys do not—actual pain from sexual functioning. The relatively few girls with some abnormal condition have undoubted pain. For the others—the great majority—the pain is slight if it exists at all, although there may be a general lassitude, some digestive disturbance, and an unusual degree of emotionality and nervousness. Some girls make a practice of spending the first day

of each period in bed—and a day's relaxation once a month in comparative isolation from social pressures is not a bad idea—but few girls require such treatment merely because of the menstrual period. Mothers are likely to be indulgent on this point, so it is probable that a first day in comfortable semi-invalidism will retain its popularity. One can hardly help noticing, however, that when a girl has something she really wants to do, she usually gets up and does it, whether or not she is menstruating. There are, in every school generation, a few girls who never have any sensations at all from their periods.

Almost all girls are more or less embarrassed by or during their periods. They wonder if the pad they are wearing is showing; they wonder if the blood has soaked through their dresses, they wonder if boys can tell if they are menstruating, they wonder if their body odor may have become offensive. They get upset because they have to explain to others why they are not going swimming or why they are not playing hockey. None of these sources of embarrassment form any part of menstrual physiology but are superimposed upon it by adolescent social life. Of all the worries, the concern about a possible stain on her dress is a girl's most constantly recurring dread. Some girls have this fear in such exaggerated form that they will not stand up in class. Since most teachers of adolescent youth are women, they should have no difficulty in recognizing and evaluating this behavior.

The girls who mature earliest have a temporary position of prestige among other girls and are often called upon to guide their less mature friends through the first few menstrual periods. A late-maturing girl has the same lack of status experienced by the late-maturing boy, but the situation is not complicated by small stature, partly because there is no general prejudice against short women, partly because success in competitive sports is not so important to her as to a boy, and partly because her growth spurt—being a feature of preadolescence—has already taken place. In fact, if her puberty is delayed long enough, she may do a little extra growing. A girl who tends toward a masculine type of body is also in a somewhat less precarious social position than a boy whose body tends to be feminine. Such a girl may feel that she is altogether too flat and lacking in proper curves, but she will be actually admired by other girls because clothes hang well on her. Also she can gain prominence, if she wishes to do so, in sports and games. In any case, she rarely meets the scorn and ostracism that are often the lot of the too-feminine boy.

When one compares mature and immature girls of the same age, one finds quite marked differences among them in attitudes and interests. A mature girl is interested in boys, in all forms of social life—especially in dances and parties—in personal appearance and adornment, and in sentimental love stories in both books and movies. Her interest in games

decreases. She does a good deal of daydreaming and may become quite introspective. The noisy, athletic, objective, energetic young hoyden who does not care how she looks, who still competes with boys, and who regards love stories as silly has not yet reached her maturity.

The three girls described below were all profoundly affected by their menstrual periods, although only one had any marked physical discomfort.

Anna, who did not begin to menstruate until she was sixteen, completely refused to admit she had any periods. After the first three or four she had her hair cut like a man's, wore men's clothes, smoked a pipe, and really appeared to be a man. She was not homosexual, or at least there was never any evidence to that effect. In fact, she appeared to be sexually frigid. She moved to a new place, got a job in an office, passed as a man, and remained there for about three years. Then she decided to change from men's clothes to feminine slacks and to let her hair grow to the length of a normal bob. She had developed a pleasant acquaintance-ship with several boys and men in the town where she worked, and many of these friendships continued unbroken for another three years, during which she was really neutral rather than either masculine or feminine. Gradually, she resumed women's clothes, married, and has lived a normal life since. It is probable that Anna would have had some form of maladjustment during her adolescent years, as her home situation was poor and she was not popular in school, but the form her escape from life took was induced by the shock of her first menstrual periods, her conviction that she could not bear a monthly recurrence, and her determination to deny the whole thing by becoming a man.

Louise's first period came when she was fourteen, after she had entered high school and had become quite popular. She had been told by her mother well in advance of the phenomenon and had not seemed at all concerned or worried over the prospect. After the periods were established, however, she began to refuse invitations to parties—not always, but for the days before, during, and after her periods. She gave up swimming and other sports altogether. After about six months of this behavior, she refused to leave the house while she was menstruating, on the grounds that everyone would know her condition and she would be too embarrassed to face people. Her parents tried to talk her out of this attitude, but without success. Louise had gotten the idea firmly fixed in her mind that she was "unclean" during her periods and must stay away from others. This idea is quite common, especially among primitive peoples, many of whom insist that menstruating women occupy a separate hut during their periods lest they contaminate the community. This state of affairs continued throughout Louise's high school career. On the advice of the family doctor, Louise was sent to a girls' college at some distance from home. In this feminine environment, she soon lost her phobia. She is still a bit shy and is easily embarrassed, but she is gradually regaining the social poise that was hers before she began to menstruate.

Madelaine's first periods, at the age of thirteen, were quite painful and she had bouts of nausea during them. After about six months there was no more

pain or nausea, only a feeling of heaviness and an occasional cramp or a headache. The physical symptoms were mild, and since Madelaine had perfectly normal organs, her doctor assured her that even these minor discomforts would not continue for long. Actually, they did soon disappear. Madelaine, however, continued to dread her periods and to react emotionally to them. About three days before a period was due she became moody, irritable, and nervous. The symptoms increased as the period came nearer. For about forty-eight hours after the menstrual flow began Madelaine was so bad-tempered, unreasonable, and violent that members of her family learned to leave her alone. After the first two days of the period, she began to regain her usual pleasant disposition and by the end, she was herself again. Madelaine tried to control her outbursts, and as she grew older succeeded to some degree, although she continued to stay alone as much as she could for at least twenty-four hours after each menstrual flow began. To her family, teachers, and friends, Madelaine seemed to be two people: one that was cheerful, lovable, and normal and one that was moody, sullen, suspicious, irritable, and explosive. This Jekyll and Hyde transformation continued until after Madelaine was married and had had her first child. The long absence of menstrual periods during her pregnancy, plus the complete absence of discomfort after they reappeared, seemed to have broken the cycle, and the sunny, happy Madelaine has been the only one in evidence since.

The first girl described above had had little security in her childhood, had always been a tomboy, and had not been given any proper information about sex before her first period. It is probable that menstruation influenced the form of her maladjustment but was only an additional and final cause of it. The second girl made in exaggerated form the withdrawing reaction that is common and normal. Most girls fear that some odor or the appearance of a blood stain will betray their condition, but the vast majority manage to overcome this fear. The notion that a menstruating woman is unclean is widespread and common among primitive peoples and is the basis of many taboos. The second girl showed no abnormal behavior but rather a too extreme form of a normal attitude. The third girl's condition is not easily explained and was probably due to glandular involvement. She had been a remarkably stable child, and she is now a remarkably stable woman. Had there been a history of a moody disposition, and especially of sudden swings from one extreme to another, one would assume that the menstrual period merely acted as a trigger to precipitate a mood that would have appeared sooner or later anyway. As it was, the black mood was linked definitely with menstruation and never occurred at any other time. There may have been a deep-seated, unresolved conflict at the bottom of the phenomenon, but it seems more probable that the causes were mainly physical and that they operated through the effect of ovarian secretions upon other glands.

Adolescent girls have other worries that are based upon physical characteristics. Girls who are unusually tall or fat become extremely self-conscious. So also do girls with unusually large hands or feet or legs. They are even more upset than boys by any irregularities in facial growth. A skin blemish

is a source of profound concern, and hair that for some reason cannot be persuaded to lie properly in the accepted mode of the moment is almost as bad. Girls are worried if their breasts are too small and even more upset if they are too large. Many a girl is deterred from games in which she would love to participate because her breasts obviously move when she runs or jumps. Even though the development of the breasts gives prestige value to a girl, she is not altogether easy in her mind about their conspicuousness. The widening of the hips is likely to inspire an attack of rigid dieting, on the assumption that fat rather than bone is the cause. Most adolescents are much too hungry to continue their dieting for long, but an occasional strong-minded damsel needs a sane explanation of the change which has suddenly precipitated her from a size 14 to a size 18 dress. Most modern girls are annoyed but not unduly alarmed by the appearance of hair on the arms or face, because the ubiquitous beauty parlor will attend to the matter, but there are still a few girls who are made miserable by facial hair and do not know what to do about it. Of the secondary changes, however, the breasts give rise to the most frequent embarrassment. Like the boy's sex organs, they are external, they move, and they show through the clothing. In one study, over 40 per cent of the girls complained of discomfiture over such manifestations as have just been enumerated.¹⁴

The School and Adjustment to Sexual Development The changes discussed in the preceding section occur mainly during the time that boys and girls are in junior high and high school. The problem is particularly acute in the former, because of the difference in the rate of development between boys and girls.

In a hypothetical school containing 200 thirteen-year-old children, of whom one half were boys and one half girls, there would be approximately the following situation: 65 girls would be physically mature and 35 immature, 30 of the boys would be mature, 24 would be just entering pubescence, and 46 would be still children. This mixture would be extremely hard to teach, because of the differences in emotional attitudes and interests. The actual school situation is even more complex than this illustration: in any one class the range of chronological ages is at least three years, with the children in each age group showing varying degrees of maturity. Thus, in a literature class in the junior high school, the majority of the girls will be physiologically mature and interested in love stories. Few of the boys will be mature, and fewer still of them will have developed romantic interests, as a group they will be interested primarily in stories of adventure. As the years continue, more and more of them begin to show the interests and

¹⁴ H. Angelino and E. V. Mech, "Some First Sources of Sex Information as Reported by 67 College Women," *Journal of Psychology*, 39 321-324, 1955.

emotional attitudes characteristic of physiological maturity. This fact of variability between sexes is not, therefore, of mere academic interest to the teacher. Because of it, for the early years of adolescence at least, she needs to furnish a wide choice of instructional materials. In fact, in any class until the middle years of high school, this matter of varying degrees of maturity is sure to create problems of evoking interest and of maintaining discipline.

In one respect in American schools adolescence is made relatively easy for girls and relatively hard for boys. When a girl has a problem she can go to her favorite teacher and ask questions without much if any embarrassment and with good prospects of getting a sensible answer. Thus a girl can, in emergencies, find an adult woman of whom she is fond, in whom she has confidence, and to whom she is not related. A boy has no such wide choice of personalities, since so few of his teachers are men. He cannot, without deep and perhaps lasting embarrassment on both sides, talk of sexual problems with his women teachers. There remain the coaches of various sports, and to them he goes in times of stress. Much of his schooltime adolescence is inevitably spent in a predominantly feminine atmosphere, which intensifies his problems and offers little aid in their solution. To offset his difficulties in school, the average boy has more ready access to information about sex outside school, unfortunately, however, some of the information he thus picks up is not true.

From the above account one can see that boys and girls reach puberty at different ages, that their sexual maturing has different manifestations, and that they have different problems. Because American boys and girls go through school together and because promotion in American schools is based more upon age than upon scholastic achievement, children of both sexes and similar ages reach junior high school at just about the time when girls begin to mature in large numbers. The period from ages 12 or 13 to ages 14 or 15 is the worst possible time for boys and girls to be educated together, because they are too dissimilar in their size, physiological age, interests, and attitudes. The number of problems in the average classroom would be appreciably reduced if in junior high school the boys were taught by men and the girls by women, if the sexes were kept separate in classes and in games, and if only at school social events was there more than casual, voluntary contact between them. The first steps toward maturity are easier for the individual if the situation is not complicated by the presence of girls among boys or boys among girls. Once functions and attitudes are established, members of the two sexes are probably better off together. Separation from late childhood onward raises more problems than it solves, but separation from twelve to fifteen has proved beneficial where it has been tried.

Summary

Adolescence is a period of internal change and development as well as of skeletal and muscular growth. Every system of the body is altered to some degree. The outstanding change is the establishment of sexual maturity, which is evidenced by both primary and secondary changes. The process takes some time in both boys and girls. The former need about two years for the development from childhood to early maturity. Girls begin to develop two years earlier than boys and reach their adult stage more quickly. Members of both sexes display a variety of attitudes toward the changes in their bodily functions, and these attitudes influence their personalities, their schoolwork, and their general adjustment to life. Of all the developments that take place during adolescence, the coming of sexual maturity is the most profound and the most significant in its influence upon the behavior and interests of boys and girls.

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6

Health during the Adolescent Period

A chapter on health in adolescence need not be long because, in general, the health of the adolescent is so good. Both the incidence of illness and the death rate are at their lowest during this period. Recent investigations show that the lowest illness rate for groups in the United States occurs in the age range from fifteen to twenty-four. The incidence of illness per 1,000 cases appears in Figure 51. In childhood the rate is relatively high, probably because children suffer from "childhood" diseases as well as from the usual human afflictions, but after age 10 the curve declines sharply. About 80 per cent of adolescent boys are not sick at all during any given year. The rate for girls is somewhat higher, probably because the age group 15-24 years includes a large number of young pregnant wives. After age 40 the curves begin to rise and continue to do so for each successive decade. Most old people are not only old but sick.

The death rate, except for deaths from accidents, is also at its lowest during adolescence. The rate is relatively high in the first years of life, and then declines rather rapidly. Those with insufficient vitality to meet life's needs seem to die by the time they are ten years old, and the survivors are able to survive for some time to come. Even sickly children often experience several years of good health and vitality during their adolescence. A recent and impressive illustration of the vigorous endurance of the adolescent has been the survival of a large proportion of the acutely deprived and severely traumatized generation of European youth during World War II.

The greatest single threat to the life of the adolescent comes from a largely preventable source: accidents. In 1951 the insurance mortality figures showed the primary causes of death in this age group as follows.

accidents	kidney disease
cancer and leukemia	poliomyelitis
heart disease and	congenital malformations
rheumatic fever	suicide
tuberculosis	homicide
pneumonia and influenza	complications of pregnancy and childbirth

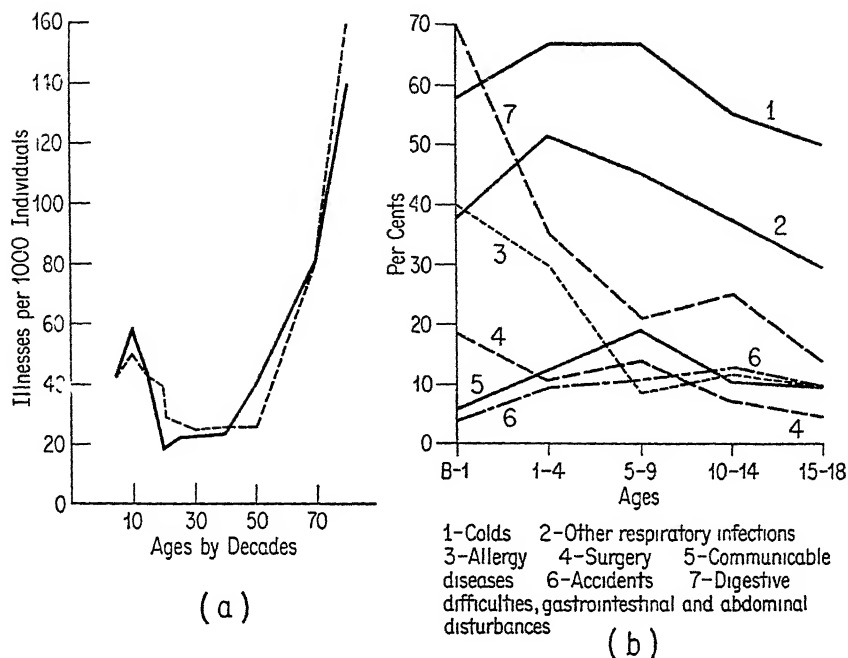


Fig 51 Disease Rates at Different Ages

(a) Based on E. S. Stieglitz, *Geriatric Medicine Diagnosis and Management*, W. B. Saunders Company, 1949, p. 16

(b) Based on L. M. Bayer and M. M. Snyder, "Illness Experience of a Group of Normal Children," *Child Development*, 21: 115, 1950

Several of these categories are an important challenge to the schools and to the community. An alert teaching staff, a school administration anxious to develop in students a keen interest in health, and adequate, interest-provoking courses in physical and mental hygiene could further reduce these fatalities as well as alleviate much adolescent misery. Young people of good health and clear understanding are the greatest asset of a community; in them rests the future. But the greatest store of knowledge about nuclear physics is useless in the wards of a mental hospital, the finest talent for music is lost beneath the wreckage of a car that has careened into a telephone pole.

One investigator in 1955¹ gathered results from 10,000 secondary school students as to what problems in the field of health most interested them. Thirty-three different topics were listed, but interest concentrated upon these five:

¹ J. R. Lantagne, "Health Interests of 10,000 Secondary School Students," *Research Quarterly of the American Association of Health, Physical Education, and Recreation*, 23: 330-340, 1952

habit-forming drugs
safety
family health
mental health
health as a social problem

Allowing for the rather dramatic first choice—probably stimulated by recent movies, books, plays, radio talks, and television presentations—this student selection comes remarkably close to the actual magnitude of the problems they face. It should stimulate teachers to make constructive use of already developed interests for a positive, integrated approach to both instruction and action in the field of health.

Naturally, all accidents cannot be avoided, but some can be. Three general factors contribute especially to adolescent vulnerability to accident:

sociocultural pressure
physical development
psychopathological patterns of personality

In American society it is important to prestige to own a good car and to drive it at something over the legal speed limit. Adolescents absorb this cultural value from adults and blow it up to even greater proportions among themselves. Thus the boy who can borrow his father's fine new Chrysler has the best chance of getting an outstandingly good "date." And, despite promises to his parents, he will probably be influenced by the demands of his peers to "let her out" and show what the car can do. However, adolescents are in a stage of growth that has provided them with bodies that are unexpectedly large, with considerably lengthened arms and legs, and with out-sized hands and feet. While they can drive a car competently around a block, they cannot always get an outsize foot onto the brake soon enough in an emergency, and overlong arms may pull a car up onto the curbing when they are merely trying to steer it around a corner. Their reaction time is extremely quick but then co-ordination is uncertain. It is common knowledge that a car can be an outlet for the weak spots in an individual's emotional make-up. The "show-off" is a public danger because a car offers him unparalleled opportunity to strut, a generation ago he expressed himself by riding a bicycle without touching the handle bars—a relatively harmless form of expression—but with a ton of car he becomes a menace. The discontented, petulant person is also a bad driver, so is the hesitant, uncertain individual. Whatever type of defect a person has comes out in his manner of getting himself through traffic. Without assuming rashly that good teaching can wholly replace the need for an ambulance, it is possible for schools to utilize the rich materials now available and to devise new techniques for developing better drivers among both adolescents and adults.

Actually, the problem is not as great as it may at first appear, since the tragic figures could be greatly reduced by the identification and re-education of the small proportion of individuals at any age who are accident-prone. The boy who is always stumbling upstairs, knocking over things, dropping things, bruising his fingers, getting cut in the shop, kicking the ground instead of the football, and so on, is among those who most need attention. So also is the adolescent with deep needs to punish or destroy, either himself or others. Actual diagnosis is the business of a qualified consultant, but teachers are so placed that they see all the children and can therefore single out the potential causer of accidents better than others can. The ordinary routine of an examination for a driving license will rarely identify the types of adolescent who are most likely to get themselves and others into trouble, but the fundamental reactions appear in every schoolroom. What is needed is recognition.

Hygiene for Adolescents

It is assuredly not the writers' purpose to outline a course in hygiene. They wish merely to call attention to certain points of stress among adolescents, to the solving of which the work in hygiene could make a real contribution.

Perhaps the first point of stress concerns the matter of mere physical size and shape. A hygiene course could be of great assistance in helping the essentially healthy boy or girl to work realistically and acceptingly with physical conditions that they *feel* to be limiting. The amount of suffering that an adolescent can go through over a supposed physical deformity or deficiency has no relation to the noticeability of the condition, and few youngsters have the compensatory brilliance of a Cyrano. Some general information and discussion of individual differences in physique, growth rate, stamina, co-ordination, and so on, would do much to help adolescents who are too shy or self-conscious to ask for aid. Most adolescents are dissatisfied with something about their particular size or shape: they are too tall, too short, too fat, too thin, too underdeveloped, too clumsy, too asymmetrical, or too uneven in their physical capacities. Adolescent girls, for instance, commonly list the following conditions as sources of worry: tallness, overweight, menstruation, underweight, defective teeth, defective speech, and shortness.

Some of these conditions are mere by-products of growth, but the pupils may regard them as being lifelong tragedies. The boy with the adult nose and the childish jaw does not know that time will bring balance to his face, nor does the late-maturing boy know that his present slight stature will change and that he will develop, just as other boys have done earlier. Even when the matter is permanent—as it is for an extremely tall girl—the hygiene

course can contribute something by stressing the advantages of whatever adolescents regard as handicaps. Above all, the teacher must never forget that a barely discernible cast in a sensitive girl's eye may be as disastrous to the girl's over-all living efficiency and happiness as the loss of a leg to a longshoreman. The following brief account of a relatively mild problem and of the adequate response of the teacher illustrates the importance of the day-to-day awareness of the entire staff to the solution of problems.

Brian K., on entering the seventh grade when very little more than ten years old, suddenly found himself shifted in physical status from the next-to-the-biggest boy in the room of a small elementary school to a fair-sized but muscularly inferior "punk" in a junior high school class that included almost entirely mature boys of fifteen and sixteen. The first few days of physical education class bewildered and infuriated him because, despite parental reassurance and explanation, he was daily confronted with the fact that he literally could not do the push-ups and pull-ups which were easily tossed off by boys who were little if any larger than he. Fortunately, a thoughtful physical education teacher looked at the boy's records with care and made it his business to reassure Brian casually that he was doing well for his age and build, but that at the moment his body had just the wrong proportions for success in exercises in which leverage counted. He also told Brian to keep on developing his muscles and soon, perhaps by next year, he would have developed the bodily proportions necessary to succeed at these apparently impossible tasks. The glow on his face as Brian carefully explained the situation to his parents that night was evidence of the effectiveness of the therapy.

This incident also points out vividly that the weight of opinion-effectiveness was already shifting in this boy's case outside the family. Parental assurance meant little to him, but the instructor's assurance meant everything.

In general, it is the adolescent's *reaction* to handicap that is important, because he feels himself to be "different." It is the sense of difference that is in many instances the real limitation. Delicately handled, a few sessions devoted to class discussion of the positive approach to handicap can be most useful. The natural reaction of the physically fortunate adolescent toward the boy or girl with a handicap is either rejection or sentimentality, neither is helpful, but the intention behind the sentimentality is at least a basis for the development of true compassion.

A second and quite obvious area of stress is concerned with problems of sex. Good sexual hygiene is extremely necessary to keep normal boys and girls comfortable, contented, and well adjusted. Adolescents cannot be expected to understand the changes that have taken place in their bodies or to acquire sensible attitudes toward them without help from adults. Presumably the relevant information and training are best given by parents, but since many parents do not seem able sufficiently to overcome their own somewhat guilty attitudes toward sexual matters to discuss the situation with

their children, it becomes necessary for the school to provide both the information and the training in attitudes

A glance at usual sources of information about sex should convince one that the school would do well to include sex instructions in some required course. Results from one study are summarized in Figure 52. Of the girls, 55 per cent had received sex information from their mothers, but only 21 per

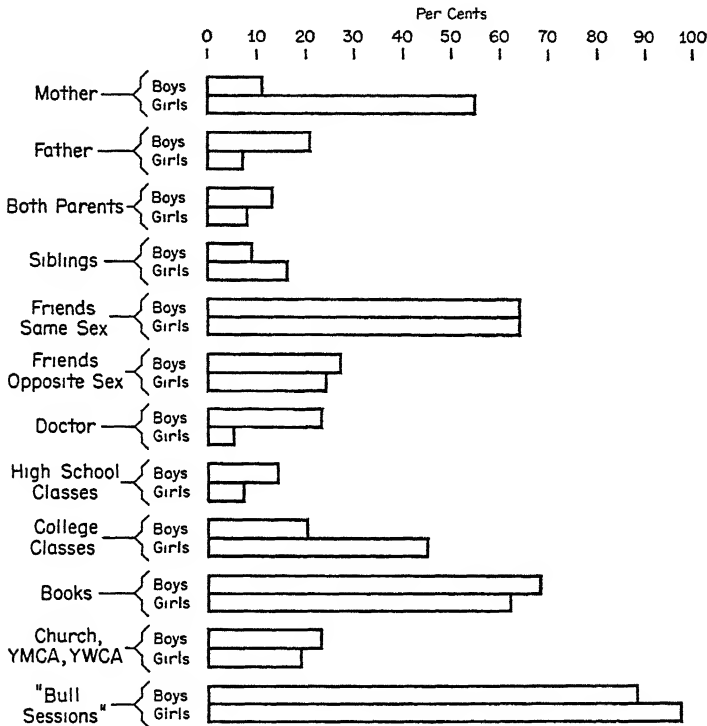


Fig 52 Sources of Sex Information

Based on figures in L. D. Rockwood and M. E. N. Ford, *Youth, Marriage, and Parenthood*, John Wiley & Sons, 1943, pp. 26, 29

cent of the boys in this study had received such help from their fathers. An average of 10 per cent got information from high school classes, 20 per cent of the boys and 45 per cent of the girls obtained further illumination on the subject from classes in college. About two thirds had read books dealing with sexual phenomena. Doctors, ministers, and representatives of youth organizations had contributed little. The commonest source of information for both sexes was the "bull session." It should be noted in passing that the usual method of enlightenment by classmates may be adequate for

acquisition of the basic facts, but they are inadequate either for learning the proper words and phrases or for developing a frank and open attitude. Parents and other older people generally do not contribute enough. Books form the main source of reliable information, but these were not read by all the boys and girls in the study, and almost certainly not by those most likely to become involved in sexual-social problems.

Another and far less comprehensive study² of college girls gives similar results. They were questioned as to their source of information about menstruation, contraceptives, intercourse, venereal disease, prostitution, and masturbation. These young women had received information from their mothers—presumably the best and most natural source—on these problems in the following per cents, respectively: 48, 8, 20, 12, 9, 4. Nearly half the mothers had given information about menstruation, and a fifth had told their daughters about intercourse. On other problems their contribution was even less. Female or male companions, however, contributed information on these same matters in the following per cents: 9, 32, 22, 10, 25, 15.

Sex education by parents is often inadequate. For instance, among 500 college girls, only 7 per cent felt that their parental instruction had been adequate, another 20 per cent had received a fair amount of instruction, 21 per cent had been given some help but not enough, and the remaining 52 per cent felt the information to have been totally inadequate.³ From such testimony it would seem that the school would have to take over the responsibility, otherwise, pupils are dependent upon unreliable sources for what they can find out.

In addition to the presentation of facts about sex, a school should do everything it can to build up a healthy attitude toward all matters pertaining to sex. The many problems faced by adolescents can perhaps best be discussed in the mental hygiene class, if there is one and if all pupils take it. Otherwise these questions also become material for the hygiene course. Sex is so important to adolescents that they need, in self-defense, to develop a sane attitude about it. The results of misinformation and of unhealthy emotional attitudes are shown in the following story.

Jack was a senior in high school. He had had a fairly good record for the first three years, but his work had been getting poorer and poorer since the beginning of his last year, and he had been unaccountably absent from school a few times. His teachers had noted a change of personality also. He seemed to be brooding about something, and he was becoming more and more isolated from his former friends. Although there was a feeling that Jack was under tension, neither his teachers nor his parents nor his friends were prepared for his attempt at suicide by slashing his wrists with a safety razor blade. After he had been taken to the hospi-

² H. Angelino and E. V. Mech, "Some First Sources of Sex Information as Reported by 67 College Women," *Journal of Psychology*, 39:321-324, 1955.

³ A. Ellis, "Love and Family Relationships of American College Girls," *American Journal of Sociology*, 55:550-558, 1950.

tal and given treatment, he agreed to talk over his difficulties with one of the doctors. At the subsequent interview, he gave the all-too-familiar story summarized below.

During his late childhood he had developed the habit of masturbating but had not been especially worried about the matter until he reached adolescence. His indulgence became rather excessive for a few months, and he developed feelings of shame. He made several efforts to break the habit, with each relapse he became more and more deeply convinced of his worthlessness. At a "bull session" some misinformed friend convinced him that only insanity lay in wait for the chronic masturbator and offered to introduce him to girls who would relieve his tension. Jack began therefore to visit prostitutes. For a few weeks he felt better, but soon he was plagued by doubts as to the possibly greater sinfulness of his present conduct and fears as to the possibility of venereal disease. About two months before his attempt at suicide he had gone to a quack to be cured of what he thought was gonorrhea. He resolved to stay away from prostitutes, but was unable to keep his promise to himself. After each visit he developed an acute panic, which, however, he had until recently been able to control. His suicide attempt had been made after such a visit while he was at the bottom of the slough of despair, reproach, and helplessness.

The doctor talked long and earnestly with Jack. He advised him to return to his former habit of masturbation until such time as he should marry. In the meantime he should keep himself busy with school, athletics, and clubs, so as to have little time left for sexual indulgence. He told the boy flatly that there was no danger of his going insane as a result of masturbation. He also went with Jack for a talk with the school doctor, who promised to keep an eye on the lad and to be available for counsel if the boy should again find himself in deep emotional waters.

It remains to be pointed out that the discussion of sexual problems should not be postponed too long. A realistic hygiene program, from the junior high school on, should take into account the needs of those boys and girls who must leave school early. These young people are going out into the community to develop as personalities and as citizens with a potential for good that is frequently as high as that of those who remain longer in the student status, but the very situations which lead to their early departure from school often indicate a greater-than-usual need for early and intensive help from school and community. Every social worker, clinic worker, personnel manager, and juvenile court official is in daily contact with the innumerable health problems which arise from information that is "too little and too late."

Adolescents will almost certainly obtain the facts they need from some other and less desirable source, in case both parents and school fail them, but the sources are likely to impart a feeling of shame and secrecy along with the information. These feelings may color the entire subsequent life of the adolescents, especially their early heterosexual adjustments, and to make it difficult for them in turn to educate their children. It is therefore

the duty of the school to step in and break the transfer of undesirable attitudes from one generation to the next

A third area of stress arises from the often peculiar and inadequate diet of adolescents ⁴ A recent symposium on growth and health during the period has pointed out that the high school group was, irrespective of economic level, the least well nourished in the entire population Possibly associated with this pattern is the fact that in a 1954 survey 90 per cent of the high school group was found to have dental caries Although in a few cases the economic or the over-all home situation accounts for the deficiencies in adolescent nutrition, most of the problems that underlie the inadequate diet are evoked by the peer pressures and cultural confusions to which these boys and girls are subjected Unfortunately, these pressures become intense at the time when pupils are just beginning to eat away from home and to select at least some of their own food

During adolescence the actual need for food is great An average boy from ages 13 to 16 needs more calories than the average man does 3,200 as compared with 3,000 a day From 16 to 20 his requirements are even higher—3,800 calories Girls from 13 to 15 need more than the average woman 2,800 calories as compared with 2,500, but from 16 to 18 the needs decrease and 2,400 calories are enough

An investigation of the diets for one week of 43 boys and 81 girls in the junior and senior high schools of two cities and two consolidated schools showed that only 4 of the 124 adolescents had had an adequate intake of food materials during the week studied ⁵ The amount of meat and eggs came fairly close to being enough, but almost all diets were low on minerals, because the boys and girls did not eat enough fruit and vegetables. In addition, a great many pupils missed one or two meals during the week About a third missed at least one breakfast, and a few did not eat breakfast at any time Over the week end the nourishment was not as adequate as it was during the week, largely because many pupils either worked or played so much that they failed to eat more than two meals a day—and often one of those was just a sandwich and a Coca-Cola

The failure in nutrition is not, except in rare pathological cases, due to any physiological failure in appetite The fairly vigorous adolescent can and will consume almost incredible amounts of food. Even a lass who announces with a tragedienne's accent that she is "pining away" for a lost boy friend may polish off three glasses of milk, a steak, assorted vegetables, four slices of bread, and two desserts One candidate for malnutrition is the

⁴ The facts in this paragraph come from E J Dvorak, "School and College Health Services," *Review of Educational Research*, 26, 522 ff., 1956, and P B Mach and A deP Bowes, "The Nutrition of Older Girls and Boys," *N C Stark Laboratory for Human Nutrition Research Bulletin*, No 1, 1955, Denton, Texas, 107 pp

⁵ C E Gray and N R Blackman, "More High School Students' Diets Evaluated," *Journal of Home Economics*, 39 505-506, 1947

homely girl who cannot unload her problems on a sympathetic family and seeks to solve them by systematic starvation in order to obtain a "glamorous" figure. Another is the boy who is so absorbed in a round of campus activities that his nourishment consists of a cup of coffee swallowed before a pre-game morning band practice, a quick hot dog with assorted condiments at a corner stand while he discusses a fraternity crisis with a committee, a bag of candy during the afternoon, and a dinner of cold creamed tuna and canned peas washed down by more coffee—with disregard for the accompanying salad—during a dinner meeting of the campus newspaper staff.

Peer-culture pressures on diet are more severe for girls than for boys. Fashions and the elements of chic, as shown by film-star models and women's magazines and society pages, vary from decade to decade, but almost always call for an exaggerated slenderness. The catalogue of a mail-order house seems to contain the only series of pictures showing women and girls who are not shaped like bed slats. For the girl whose body build and appetite tend to be generous, there is a constant pressure to diet—and usually some pretty weird practices come under her notion of dieting. Cycles of starving when her desire for slimness is uppermost and of stuffing when her appetite reasserts itself leave her figure about where it was originally, but her body and personality—not to mention her schoolwork and her friendships—may be suffering from the abuse. Most boys and girls are too healthy and too hungry to carry on this fashionable foolishness for long, but if maintained, it can become a serious health hazard.

Sound nutritional patterns should certainly be explained to adolescents, but a teacher can as effectively talk to a blank wall unless she liberally laces her information concerning vitamins and proteins with the motivations of achieving a clear skin, building more athletic endurance, and so on, or she can attach this discussion of nutrition to relevant materials from the World Health Organization, using the weight of international concern to reinforce the immediate nutritional needs of her students; this approach appeals to those who reach first for the service-to-others frame of reference.

One also has to realize that food patterns are deeply ingrained in cultural, socioeconomic, and familial practices, and are extremely resistant to change. For instance, one Negro boy with whom one of the writers talked was greatly concerned about the eruptions on his face, upon questioning, it appeared that all three of his meals consisted of identical food—low quality, half-cooked bacon, fried corn pone, and coffee. When he was asked if he thought the diet could be supplemented by other food, he answered that as far as he knew, there was nothing else in the house and he doubted if his mother knew how to cook any other food. For the boy himself, the Gordian knot could be cut by getting him a job in a cafeteria and helping him select his first few meals from an array of foods of which he had never even dreamed. But changing the family food pattern would not be easy. In

less extreme cases, there are usually elements of good nutrition in the family diet, and by emphasizing the positive approach of praising what one can and refraining from derogatory remarks, one can often make a real contribution through the adolescents to the well-being of the entire family. It is certain that if the teaching is to be incorporated into behavior in an enduring and useful way, it has to be adequately motivated from the adolescent's point of view.

Another area of strain is the overfatigue that many high school pupils show. To be sure, they are all full of an abounding vitality, of which the teacher is only too aware. The average high school boy or girl uses up more calories in one day than a teacher does in three. They are forever on the go, if their attention is caught, they will work endlessly at a given chore, they rush about at top speed, they burn up energy in vigorous games, they violate most of the rules of hygiene, but at the time they seem none the worse for it. They are often restless in class for no other reason than the mere strain of sitting quietly when all their urges are to get up and "do something." Probably this period of high energy would not last for long, even with the best of hygiene, but it might endure a bit longer than it usually does if adolescents could be persuaded to take a little better care of themselves. But it is uphill work to convince a healthy sixteen-year-old that he should slow down, his activity gives him so much satisfaction—both physical and social—that he has no motive for restricting himself and every motive for urging himself on to even greater outlays of vital force.

The situation becomes increasingly serious in the case of the adolescent who is out to prove that he can "take" anything. Possibly he can. But probably the drive of his personality needs will push him beyond his physical limits. The most obvious place to look for overfatigue is in the area of competitive sports, although there are other places, as will presently be noted. While high physiological and bodily efficiency is typical of this age group, adolescents can be motivated by the tremendous peer pressures and emotional overload of competitive situations into exhausting themselves and pushing a normally adequate body past its critical level of endurance, with subsequent lifelong damage. One of the writers recalls an awkward, lumbering lad who was too poorly co-ordinated to play football successfully, and because the boy was eager to do what he could "for the team," the coach made him an animated tackling dummy. When the first team was working on defense patterns, this lad carried the ball. He was slow enough that the technique of the defense pattern could be demonstrated. He spent entire afternoons being dumped from all conceivable angles. The coach and his teammates praised him for his willingness to perform this relatively menial chore, and admired him for his stamina, although he never played more than a few minutes at the end of a game that the first team had already won, he felt he was an integral part of the scene—and he was. His

position among his peers was so secure and so pleasant that he told no one of a pain in his side. But one night he had to be rushed to the hospital with a strangulated hernia.

Although the football field and the tennis courts are perhaps the most obvious places to watch, there are others. A teacher should be alert to the needs of the young artist who turns up week after week on Monday triumphant but haggard after a week-end painting spree, to the pretty and popular girl who is chairman of everything in sight and begins to fall asleep in class despite her vitality and keen interest, to the dance student who may get through tomorrow's performance on that sprained ankle and may not. Any teacher needs to keep a weather eye out for those adolescents who are either less well endowed with vitality than the average or are more driven by their inner needs, lest they come a cropper in the course of their headlong rush.

The writers are not altogether sure that a section on mental hygiene belongs in this chapter, but it seems best to include it, since the work—if given at all—is usually included as a part of the hygiene course. The basic facts and fundamental principles of mental hygiene should most assuredly be presented in some required course. Few units of material could be of greater value to the adolescent boy or girl. The urgency of the entire program is best revealed through statistics.

Different investigators have estimated the number of emotional deviates in the adolescent population at widely varying proportions. Such figures obviously depend upon where one draws the line between what is normal and what is abnormal, and upon the adequacy of the survey from which each investigator made his estimate. Most studies to date deal with the occurrence of abnormality either in colleges or in the general population, rather than with its frequency in secondary schools. However, one can use these studies as a base from which the probable percentage of abnormality at any age level may be deduced. For instance, first admissions to the mental hospitals in the United States in 1956 were about 200,000, with an additional 100,000 readmissions.⁶ There is a population of about 750,000 in the mental hospitals being given care of very uneven adequacy and at a cost of almost five billion dollars annually. This cost is split about evenly between the states and the federal government. Such an army of sick people represents a loss every year of some four billion dollars in unearned wages. Moreover, many of their families must be supported from public funds. Besides these hospitalized patients who are so acutely ill that they must be cared for in institutions are those who are painfully handicapped by neuroses—an estimated 10,000,000,⁷ for whom less than one fifth the needed outpatient

⁶ *Social Work Yearbook, 1957*, National Association of Social Workers, No. 4, 1957, p. 368.

⁷ M. L. Hunt and R. G. Gibby, *Patterns of Abnormal Behavior*, Allyn & Bacon, 1957, pp. 418-430.

facilities are available, a probable 3,500,000 chronic alcoholics, and a known 50,000 narcotic addicts, who represent only a small fraction of the addiction problem. If one adds to these people the clearly psychopathic delinquents and criminals and the 17,000 suicides a year, one arrives at a staggering and tragic number of individuals critically in need of help.

It is a difficult matter to estimate how many of these emotional casualties are in the adolescent age range, partly because the statistics are not specific enough and partly because many adolescent maladjustments do not come to the surface until the boy or the girl becomes an adult. However, the problem at the adolescent level is of considerable dimensions. Thus, one prominent outpatient clinic for psychiatric treatment reports that the yearly proportion of admissions is quite constantly 74 per cent adults, 12 per cent adolescents, and 14 per cent children.⁸ In 1955 the average period of treatment for adolescents at this clinic was 22 months.

For two or three decades colleges and universities have been maintaining mental clinics to which many students might come of their own free will for advice, and to which a few were sent each year by members of the administrative or instructional staffs. One report that covers twelve years of work in a university gives the following figures: in a yearly student population of over 13,000 there was a yearly average of 55 cases of serious mental disorder, or a rate of 4 in each 1,000. The number with acute conditions was less than 1 in 1,000, however. Each year, 8 per cent of the students consulted members of the clinic about some problem that was troubling them.⁹

In another university of 7,000 students, 600 cases were under some form of psychotherapy.¹⁰ About forty students withdrew each year because of serious maladjustment. Of those under therapy, approximately half were on long-term treatment because of the seriousness of their maladjustment. The referrals to the clinic were increasing rapidly at this university in 1955, and other studies elsewhere have confirmed this trend. It is not, however, clear whether there is actually greater need for treatment with each passing year or greater willingness on the part of the students to come spontaneously to the clinic or greater sensitivity on the part of teachers in sending them there.

Further information concerning the prevalence of mental and emotional abnormality comes from reports by Army and Navy medical staffs during World War II. These figures were profoundly shocking to civilians, most of whom were not aware of how common maladjustment is in everyday life. A total of 1,850,000 men were rejected on grounds of mental or emotional

⁸ California State Department of Mental Hygiene, *1956 Annual Report*, p. 41.

⁹ T. Raphael and L. E. Himler, "Schizophrenic and Paranoid Psychoses among College Students," *American Journal of Psychiatry*, 100:443-451, 1944.

¹⁰ H. B. Carlson, "Psychiatric Casualties in College," *Educational Administration and Supervision*, 41:270-276, 1955.

abnormality¹¹ Of this number 37 per cent were mental defectives, 42 per cent were neurotic, and 1 per cent were psychotic, the remaining 20 per cent suffered from nervous, not mental, diseases

The original screening eliminated those with obvious mental and emotional peculiarities It did not and could not tell in advance which men were going to break down under training As the war progressed and the pace and strain increased, the number of men who had to be given a neuropsychiatric discharge became greater In 1944, 48 per cent of all discharges for disabilities of any kind were for neuropsychiatric disorders Actual psychoses made up only 10 per cent of this total The most frequent conditions were anxiety neuroses, psychosomatic disorders, and psychopathic personalities

With some exceptions, the incidence among civilians is not different from that reported for the armed services Civilian figures include, however, a great many cases of brain disease and other conditions having a largely if not wholly physical basis, most of these occur among the older age groups When one subtracts these cases from the totals in a sample year, one is left with 33,823 newly admitted patients with psychoses, 4,962 with neuroses, and 14,471 with more or less serious disorders of personality¹² These are conditions that, as far as is known at present, arise from chronic maladjustment rather than from any underlying physical condition

In 1954 there was a total of 7,388,000 high school students and 909,000 college students, plus 2,203,000 younger adolescents in junior high schools in the United States¹³ A number of studies made of particular communities have shown that approximately one fifth of the total school population is in need of professional attention to their problems of adjustment Assuming this figure to hold for the entire country—and it is more likely to be too low than too high—there would be some 2,100,000 adolescents in emotional difficulties

The reports upon observed frequency of mental abnormality vary somewhat, because no two use the same standards of what constitutes a deviation from the normal, hence several will be cited in order to give a fair sampling

In one instance the survey was limited to those in grades 3 to 6, with a second survey being made of the same children a year later¹⁴ Of the 1,499 children, 287, or 29 per cent, were seriously maladjusted The percentage increased with each school grade There were two maladjusted boys

¹¹ From figures furnished by the Office of the Surgeon General of the Department of the Army

¹² W. C. Menninger, "The Mentality of Emotionally Handicapped Veterans," *Annals of the American Academy of Political and Social Science*, 239 20-28, 1945

¹³ Based upon tables in the *Statistical Abstracts* of the United States Census, 1957, p. 82

¹⁴ A. R. Mangus and J. R. Seeley, "Mental Health Problems among School Children in an Ohio County," *Understanding the Child*, 18 74-78, 1949.

for each maladjusted girl. Almost half the retarded children were on the list. It is encouraging to note that in the retest during the following year, after the teachers had had a little time to help the maladjusted, the pupils who made the greatest improvement were those who had originally scored the lowest.

The second county survey included all children from the first grade through the senior year of the small local college, a total of 2,947 individuals.¹⁵ From 5 to 10 per cent made very low scores. Two thirds of these cases were boys. There was a decrease of extreme maladjustment with age, the college students making the best scores of all. The results from these two surveys do not always agree, partly because the investigators did not use identical tests and methods and also because they did not regard exactly the same degrees of deviation as indicating severe maladjustment. The larger number of boys is, in the writers' opinion, due to the overwhelmingly feminine atmosphere of maternal supervision at home and female supervision at school. The majority of women, whether mothers or not, have little comprehension of a small boy's needs, even though they may love him dearly. If the situation were reversed, and little girls were supervised at home mainly by their fathers, and in school by adult men, their maladjustment would probably exceed that of the boys, although it might take other forms. It is also interesting that in one survey the frequency of maladjustment increases with age, while in the other it decreases.

From all sides, then, there is plenty of evidence that the types of mental illness which should be preventable are not being prevented and that the over-all problem of such illness is of vast proportions. The most obvious place for recognition of the premonitory symptoms is the schoolroom. The pupils are in a "standard" environment, and they are being observed daily by an adult who cannot help knowing how normal pupils react to such surroundings. If teachers can be encouraged to recognize the importance of deviations, they can probably do more than any other one group in the civilian population to reduce the extent of mental illness. They have a good basis for comparison, and they do see the deviations, their shortcoming is the failure to evaluate correctly what they see.

The often-unsensed troubles of the "driven" adolescent are, in fact, among the primary concerns of school and community today. Whatever confusion, deprivation, insecurity, or inadequacy has been latent in the development of a child is almost certain to become a driving pressure when he encounters the stresses of adolescence. In most schools the hygiene course is the most likely place for discussions of mental health problems in general and those of adolescents in particular. It should be realized that the relatively impersonal approach by means of classwork and reading is

¹⁵ E. C. Hunter, "The Summary of a Mental Health Survey of Spartanburg County, South Carolina," *Journal of Experimental Education*, 17:294-308, 1948.

often extremely useful for those boys and girls who are either too shy to discuss their problems with others, are resistant to adult "interference," or are not themselves aware that they have problems. There is likely to be less emotion and more understanding in a group than in an individual approach, although the group approach often needs to be supplemented by interviews to help students apply to themselves what they have learned. More will be said on this point in a later chapter.

Finally, the writers would like to emphasize the need for giving young people information about sources of help for various problems, as these are taken up by the teachers of a hygiene course. There would be fewer victims of inadequate care in such life-and-death problems as cancer or venereal disease if the young people involved knew where to go for help, that is, if they knew about clinics, hospital outpatient service, and so on. Probably the best way to get rid of the numerous quacks is not by legislating—although that has its place—but by telling people where they can get better treatment. An amazing proportion of adolescents are reduced to back-fence methods because no responsible person has ever told them what facilities in their community may be available. Thus, the sixteen-year-old boy with a "steady" who is carrying his child does not know what to do with this problem, physically, socially, or emotionally, and he is likely to "solve" it by sending the girl to an abortionist—and perhaps robbing the corner grocery to get enough money for the purpose. The number of adolescents who cannot find a solution of any kind is reflected by the suicide rates in this age group, one of the first ten killers is the adolescent's own despair.

Summary

During adolescence, when boys and girls are developing their own abilities to care for themselves but are powerfully influenced by family and peer pressures, adequate information and guidance in matters of health are major responsibilities of the school. Alert, understanding handling of both expressed and unexpressed needs and problems is essential to the individual welfare of adolescents and to the welfare of the community. To make instruction in health and hygiene a functioning part of the adolescent's life, it must bear a relation that *he* can recognize to his own needs and to the patterns of the world he lives in.

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7

Physical Deviates

The teacher in today's schools is likely to have the services of a school health program with medical and nursing personnel, and quite possibly some service in mental health. Almost all high schools now have a school nurse or a school doctor, or both. The great majority of schools have also some arrangement for dealing with problems of mental health. Sometimes the appropriate person is in the medical service, sometimes in the psychological or counseling service. In other cases, the school doctor or the nurse will call in whatever help may be needed. The proportion of schools having trained psychiatric or clinical consultants is quite small, but assistance can usually be obtained when it is really needed. The teacher is often the person who refers pupils to health services of all types, and she is frequently asked to co-operate with medical personnel in the carrying out of recommendations.

Before beginning the discussion of specific types of physical disability, it might be well to consider the incidence, as reported to various agencies. These totals, it should be remembered, are only for reported cases, the actual number is undoubtedly somewhat higher, how much higher is not known. One summary, given in Figure 53 on page 104, classifies the thousands of children who suffer from various types of handicap. The commonest type, orthopedic disabilities, totals almost 125,000. Next in frequency comes cerebral palsy—but these children are almost never in the public schools unless they are in some special class. Deafness and other defects of the ear are more frequent than reported defects of eyesight, although minor visual defects, which are usually not reported, are certainly much more frequent. Figure 54 (page 104) gives similar results from vocational rehabilitation centers. The most common type of defect, equaling 40 per cent of the total, is again orthopedic. The relatively high number of amputation cases is probably attributable to the recent war. It should again be remembered that these are people—some adolescents but mostly adults—who came or were sent to the centers for help in vocational adjustment, but there is little reason to suppose that all the remaining, unreported cases would vary much, insofar as the type of disability is concerned. Surveys of single school systems usually show four major types of deficiency: dental decay, inadequate vision,

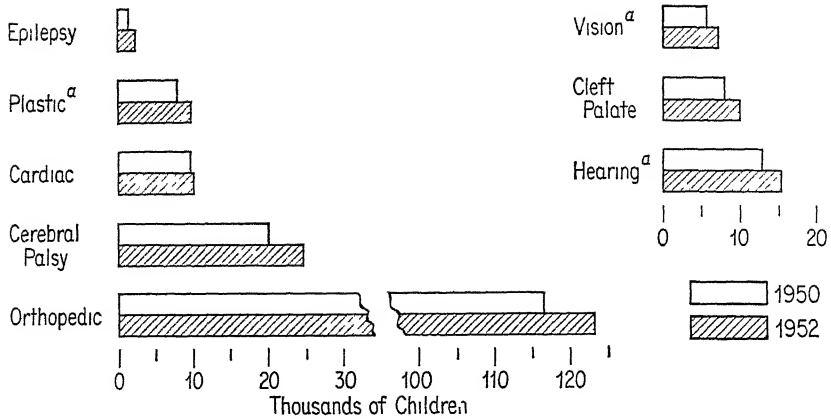


Fig. 53 Incidence of Various Physical Handicaps

Based on the *Annual Report of the Department of Health, Education, and Welfare, 1953*, p. 53

^a Under "Vision" and "Hearing" are included all abnormal conditions of eye or ear. "Plastic" includes those having scars or malformations that need plastic surgery.

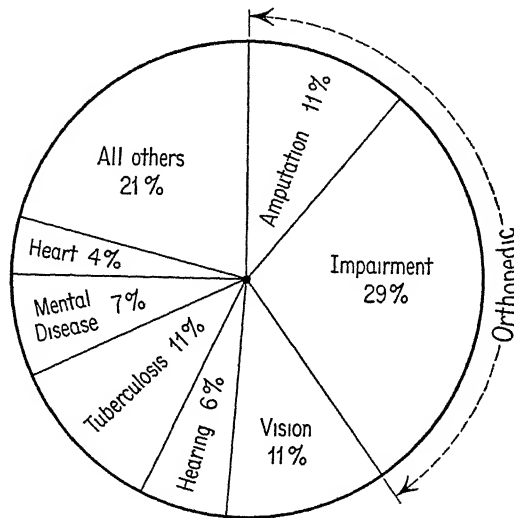


Fig. 54 Types of Disabilities Reported to Rehabilitation Centers (58,000 cases)

Based on *Federal Office of Vocational Rehabilitation Report, 1955*, p. 185

inadequate hearing, and various forms of malnutrition. The reasons for the differences in school figures as compared with state or national figures are not far to seek. The most disabled children are not in school, and, while there are cases of various limiting physical conditions, there are rarely enough in any one school to rise above 1 or 2 per cent. These small figures

are likely to be dropped in a published report of findings, or they are included under the heading "All Other Types." For these various reasons it is difficult to tell a prospective teacher even approximately how many children with the conditions to be discussed presently she is likely to find in her classes over a period of years. Not many, but she needs to know how to handle the ones who do appear, not only because failure to do so makes the afflicted pupil's life harder, but because the harmony of her classroom is likely to be disrupted if adequate understanding and support is not provided for the handicapped child so that he can participate in the work of the class.

The increases shown in Figure 53 above are due in part simply to the increasing number of children—particularly in the generation of "war babies"—of all types, including those with defects. Part of the increase is also due to greater awareness of the services to be obtained from specialized bureaus and agencies. Probably the proportion of disabled children does not change within two years.

Defects of Vision

Inadequate vision is so obvious a handicap and so common as to merit first place in the discussion of defects. The proportion of school pupils whose vision is insufficient for their needs is shown in Figure 55, whose results are based on three independent studies. The curve rises steadily during the school years, reflecting both age and the increasing demands made by schoolwork upon those who remain in school. Any teacher can easily observe the fact that as pupils continue through school, more and more of them have to wear glasses. In the lower grades children can learn much by ear and thus avoid eyestrain, but each successive year demands more and more reading, both in school and out. In a study of 5,000 pupils, only 18 per cent of those in elementary school and 12 per cent of those in high school were found to have perfect vision.¹

In 1934, 150 children were selected for study of growth patterns of all kinds. Among other things, they were given eye examinations. At this time the average age of the children was thirteen years. In 1954 when their average age was thirty-three, 95 of the original group were again tested. At both age levels the girls showed nearly twice as many eye defects as the boys. At the second examination 25 per cent of the men and 47 per cent of the women had defective eyesight. It was estimated that by the time these young adults were forty all of the women and at least half of the men would have defective vision.²

¹ M. M. Dalton, "A Visual Survey of 5,000 School Children," *Journal of Educational Research*, 37: 81-94, 1943.

² M. W. Morgan, University of California unpublished study, which is to appear in the *American Journal of Optometry*.

School pupils show their visual defects clearly enough, but teachers do not always recognize the symptoms holding the book too close to the eyes, going to the board to read what is on it, going to stand under the clock in order to read the time, squinting, rubbing the eyes, shading them from light, complaining of pain after reading, becoming irritable after or clearly

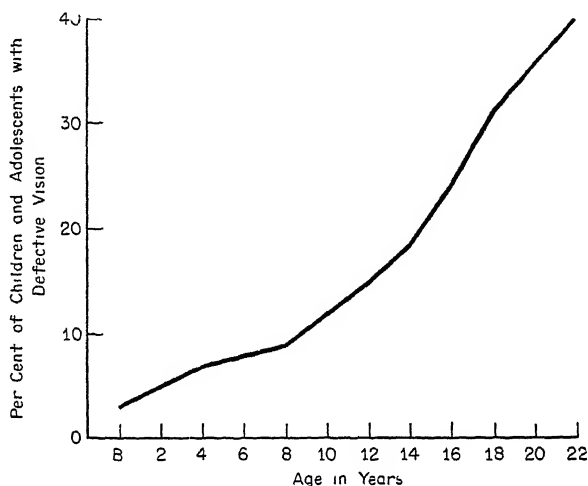


Fig 55 *Effect of Age and Strain upon Eyesight*

Based on figures in L. H. Brownlee, "A Threat to Healthy Eyesight," *Hygeia*, 20 77-79, 1942

uncomfortable while reading or doing other close work, and so on. If a pupil with defective vision really wants to study he will strain his eyes, complain of discomfort, and be treated. Many pupils, however, do not have a passionate desire for learning, so they build up the defensive habit of neglecting their work as a way of saving their eyesight. They do not complain of eyestrain because they rarely do enough reading to feel any. Their main symptom is not pain, but abstinence from study. The fundamental defect is often so covered by emotional attitudes about schoolwork that they themselves do not know why they hate studying or become restless after a few minutes of reading. A teacher should suspect inadequate eyesight whenever apparently intelligent pupils do not study. Naturally, there are other reasons, but defective vision is a common cause.

Neil entered high school with a record of good work in the primary grades, average work at the intermediate level, and poor work in junior high school. It had been assumed that he was a dull pupil who was making heavy weather of his schooling because he was approaching the limits of his ability. Neil had had four tests of intelligence before leaving junior high school. On the first—a group test

for use with primary grade children before they could read—and on the Binet he had earned IQ's of 121 and 113. On the last two—both group tests involving reading—his IQ's were 87 and 84. The high school counselor read the record and was struck both by the loss of IQ and by the progressively poorer schoolwork. She wondered if the boy were deteriorating and therefore sent for him to come to her office.

During the subsequent interview Neil showed little insight into his difficulties. His chief complaint was that the teachers gave too long assignments. Upon further questioning he admitted that he had never liked to read. He enjoyed school but was afraid he would not be able to finish the twelfth grade. He regarded failure as a disgrace and seemed unduly preoccupied with thoughts of failure. He had recently begun to fancy that other pupils were calling him stupid behind his back. In spite of his evident discouragement, the counselor felt that the earlier IQ's were more accurate than the later ones, but if they were correct then there must be some block, defect, frustration, or handicap that was interfering with normal progress. Neil's dislike of reading was especially curious, assuming that he was fundamentally bright rather than dull. The counselor decided to watch the boy read and see what she could deduce from his procedure, so she pretended to be busy with finishing a report and asked him to read his history assignment until she was free again to continue the interview. As she shifted papers about on her desk, she covertly watched him. Neil read about three minutes and then began to wiggle and twist. At the end of five minutes he was glancing out the window, closing his eyes for several seconds at a time, and becoming more and more restless. Presently he went out to get a drink, then to go to the toilet, then to look at something on the bulletin board, and then to make a telephone call. At the end of thirty-five minutes he had completed barely five pages of reading. His behavior had impressed the counselor as being much like that shown by small children who see just well enough to read a little but not well enough to read comfortably. She therefore asked Neil about his eyesight, as far as he knew, it was normal. He was clearly not nearsighted, and he said he had never been troubled with headaches. Nevertheless, the counselor sent him to an oculist, who found a slight astigmatism and a slight muscular imbalance. Both conditions were mild, but together they made reading an uncomfortable procedure. In the first three grades Neil had learned to recognize the commonest words but had followed the stories by guesswork and had learned other subjects largely by ear. He was able to read for only two or three minutes without discomfort, and he simply stopped reading before the discomfort developed into pain. Being a bright child he got along well enough at first, but in the intermediate grades the reading load became heavier and not everything in his books was discussed in class. However, he picked up enough by listening carefully and by reading in short snatches to keep up with the class average. In junior high school his failure to read became too great a handicap, even for a bright mind. Two of his teachers had evidently suspected a reading deficiency and had independently given him tests, but Neil could always pull himself together for the few minutes that were necessary for a test, so he made good scores on both occasions, although he was a little slow. The boy's defect was hidden even from himself, but it had influenced both his progress in school and his emotional attitudes.

The wearing of glasses made consecutive reading possible for Neil, and he no longer had to protect himself by neglecting his work. Incidentally, the boy's behavior was evidence of his fundamental intelligence. Dull children go on trying to read and get first headaches and then attention, it takes a bright child to neglect work in order to stay comfortable! For a semester Neil attended a class in study methods, since he had to learn how to work efficiently and to break the habits formed during eight school years of stopping after every few lines to rest his eyes. By the end of his freshman year Neil was doing good work. During the following summer he read from morning till night. The world of books suddenly burst upon him, and he was fascinated with the ideas he found. His parents had to chase him out of the house to play for a while each day. Neil is now a successful and well-adjusted college sophomore.

Defects of Hearing

The actual number of school children with defective hearing in the entire country can only be estimated from sample surveys in which all the children in a given district have been tested. In one such survey,³ 20,273 children out of a total of 20,663 enrolled in the schools of a single county were tested by group tests on a single day, the 390 absentees were not measured, but there is no reason to suppose that the addition of results from this accidentally missing half of 1 per cent would make any difference in the figures. The tests indicated defects of sufficient degree to interfere with schoolwork in 1,646 cases. Of these, however, 82 were found upon individual testing to be normal, their previous low score on the group test having been presumably due to mere inattention. Removal of wax from another 129 pairs of ears raised the hearing of these children to a satisfactory level, leaving a final total of 1,435 children, or approximately 7 per cent of the total enrollment whose defect was established beyond doubt by the individual examinations. It should be remembered that in the case of both vision and hearing, the results here quoted do not include blind, nearly blind, deaf, or nearly deaf children, since they are not in the public schools. At the high school level it is probable that five pupils in every hundred do not hear perfectly what is said to them.

The symptoms of hearing defect are usually quite obvious: frequent asking to have questions repeated, indifference to noise or the whispering of other children, failure to look up from work at some sound that is sufficient to attract others, cocking the head sideways to listen, failing to catch directions given orally, speaking in a "flat" voice, and putting the fingers into the ears to rub the canal. Such items of behavior are sometimes regarded as mere personal idiosyncrasies and are therefore disregarded.

³ A. A. Grossman and R. E. Marcus, "Otolaryngological Experience in a Hearing Survey," *Journal of Speech and Hearing Disorders*, 14:240-246, 1949.

The indirect results of inadequate hearing are illustrated by the following history.

Edward is a young man of twenty-five and, at the present time, a graduate student in a large university. He happens to be majoring in an overcrowded field, and even the graduate classes are large. Edward began to lose his hearing when he was about sixteen years old and was not accepted in the army at eighteen because he could not pass the hearing tests. Edward comes of a French family and did not learn to speak English until his family came to this country when he was about fifteen. At first he attended a French day school and did not therefore make serious efforts to learn English until after his hearing had begun to deteriorate. His English is now fluent, and he has an unusually large vocabulary, but he cannot hear well enough to correct his mispronunciations, which are numerous.

Edward had increasing difficulty with his work as he progressed through high school and college. He has a quick mind and is a good enough student, insofar as what he can read is concerned, but he does not hear with sufficient accuracy what the teacher says in class, even though he sits in the front row. A class discussion is practically lost as far as he is concerned. He has wanted to get a hearing aid, but he has never been able to get enough money ahead to acquire one. Although Edward's undergraduate record was good, his graduate marks are always on the edge of eliminating him. He can get a "B" in most of his courses, but once in a while, when a professor has a light voice or if there is an unusual amount of class discussion, he gets a "C." Since he has to maintain a "B" average, every "C" has to be balanced by an "A," and in a group of any size it is almost impossible for him to get the highest grade. His major field is so popular that even the seminars enroll fifteen to twenty students. Since Edward does not know which student will be called upon to talk on any given day, he cannot be sure of sitting near enough to hear the student's report. His only "A's" in graduate work have come from his thesis work, in which the contacts were entirely individual.

Edward has relatively few friends, although he is a pleasant lad for the most part. In recent years he has developed a suspiciousness about people that is probably based upon his incomplete hearing. Edward has been strongly advised to take a semester off from his university work, earn enough money to get whatever hearing aid is best for him, and return to school with as little handicap as may be possible. Otherwise, he will certainly never get the degree he wants. And his social contacts and chances for employment will remain on a level far inferior to that consonant with his superior abilities.

Defects of Speech

Many investigators of speech difficulties do not distinguish between stuttering and stammering. Actually, both are often called stuttering, and in some instances the same child shows the two defects simultaneously or at different times. It seems, however, worth while to describe both types of defect. Stuttering consists of a repetition of a sound, as in the song 'K-k-k-k-Katy, B-b-beautiful K-k-Katy . . .'. The difficulty may occur with

any consonant. If one child in a school stutters, the others will imitate him, and at least one or two may fall victims to their own mockery and find themselves unable to stop when they want to. Stammering is quite different. The stammerer does not repeat sounds, he is unable to make any coherent noise at all. His mouth opens, his jaws move, and he tries hard—but nothing happens. The accompanying facial contortions are painful to watch. Sometimes the stammerer finally breaks through a “block,” and sometimes he does not.

Other types of speech defect that are common in the first grade are lisping, the substitution of one sound for another (such as “w” for “r”), and baby talk (“ittie” for “little,” for instance). The last two have virtually disappeared by the time pupils reach high school, but an occasional lisper is still heard.

The number of pupils with speech defects has to be estimated from samples, as in the case of both hearing and vision. The number found in a given survey depends in some measure upon what the investigator includes among defects that are less obvious than those already mentioned and upon how he classifies his results. Thus, from a study of 13,500 children, one investigator reports 13 cases of cleft palate,⁴ 77 stammerers, and 175 instances of defective articulation.⁵ These figures give a total of approximately 2 per cent. Other estimates are higher, but they include more types of defect. For instance, the total in another study⁶ comes to 700 disorders for every 10,000 school children, or 7 per cent, but this total includes many cases of harshness and breathiness in the sounds or mere retardations of speech development. Both these studies and a third⁷ arrive at almost the same figure for stammerers: 0.5 per cent, 0.6 per cent, and 0.55 per cent. The relation of boys to girls varied from 7 to 1 to 3 to 1.⁸

Stammering seems to be a very old form of reaction to tension and insecurity. It existed among American Indians before the arrival of the white man and seems to have been precipitated by such anxieties as fearing oneself bewitched.⁹ It betrays its emotional origins most clearly by its capricious appearances and disappearances. There are, for instance, concert singers who stammer when they talk, ministers who preach fluently but stammer in talking with parishioners, students who stammer in their native

⁴ A condition that exists at birth. After proper surgery and with, or without, an artificial palate, the child can learn to speak. This defect is due to purely physical causes.

⁵ P. Henderson, “The Incidence of Stammering and Speech Defects in School Children,” *Bulletin of the Minnesota Public Health Laboratory Service*, 6:102-105, 1947.

⁶ W. Johnson, “To Help the Child with a Speech Handicap,” *Child*, 15:12-14, 1950.

⁷ M. D. Schindler, “A Study of the Educational Adjustment of Stuttering and Non-stuttering Children,” pp. 348-357 in W. Johnson and R. R. Leutenegger, *Stuttering in Children and Adults*, University of Minnesota Press, 1955, 472 pp.

⁸ H. Schuell, “Sex Differences in Relation to Stuttering. Part I,” *Journal of Speech and Hearing Disorders*, 11:277-298, 1946.

⁹ E. M. Lemert, “Stuttering among the North Pacific Coastal Indians,” *Southwestern Journal of Anthropology*, 8:429-441, 1952.

English but speak acquired French or German or Spanish without defect, business men who conduct as much business as possible on the telephone because they stammer only when face to face with another person children who recite aloud to themselves in their rooms without hesitation but cannot say the same words in class, actors who are tense and hesitant in speech off the stage but relaxed and fluent on it (even when they have to invent a few lines to cover an unexpected pause), teachers who often stammer in one class and never in another, and so on. One of the writers knows a young man who teaches his college classes with not more than two or three attacks of stammering in a year, but he is as likely as not to come to grief in asking his best friend for a match. In order to reach any understanding of such odd phenomena, one must go back to the early days of the stammerer and trace the development of his difficulties.

Either stuttering or stammering begins in an utterly commonplace sort of way. The small child merely hesitates, breaks his rhythm, repeats a letter or a word, or mispronounces a sound. Practically all children go through this stage, at some age between two and five, when their ideas flow more rapidly than their words. If no one pays any attention to such symptoms, no harm is done, and the maturing speech mechanism soon becomes adequate, even though some errors of articulation or pronunciation may remain. The stage of hesitation and broken rhythm is called primary stuttering. Unfortunately, some parents are not willing to let nature take its course and merely wait while their child grows up. They begin to correct him, to interrupt him, to make him go back and repeat, to scold him, to compare him unfavorably with his siblings, to fuss at him, to be ashamed of him, and generally to make talking an unpleasant and thoroughly exasperating experience.¹⁰ Johnny dashes into the house to tell his mother about a little boy who has just moved in next door, but before he gets out his first sentence she has interrupted him four times. He is unable to communicate to her his excitement because she keeps on correcting him until what should have been a pleasurable sharing of an episode has deteriorated into a rejection of Johnny's story and incidentally of Johnny himself. Telling his mother about the new little boy *should* have been fun, but the experience was spoiled by criticism. Naturally, one has to correct a child's speech but not when he is in the full flood of narrative. If enough such disappointing experiences pile up in a child's life, he becomes torn between his natural desire to speak and a contrary desire not to speak, between an urge to shout his mother and an urge to please her, between a hostility toward her and a love for her. During this period Johnny is not so much acquiring a stammer as acquiring an attitude of deep concern over the hesitations he already has.

¹⁰ C. Van Riper, *Stuttering*, National Society for Crippled Children and Adults, 1948, 60 pp.

At this point the child has reached a parting of the ways, and the path he follows will depend in large measure upon the attitude of his parents. If the parents are overprotective, oversolicitous, and overanxious, if they have high standards for their child, if they demand perfection from him, if they bewail his defect and beg him to correct it, they will succeed in transferring to him their own anxiety, their own tension, their own fears. In extreme cases, they may reject him because of his failure to reach their standards. The child responds to his parents' concern by trying harder and getting worse, or by outbursts of irritation, or by withdrawing from the whole problem and not talking at all. As the weeks roll by, the act of talking becomes more and more closely associated with struggle, tension, frustration, failure, disappointment, discomfort, displeasure, and perhaps punishment. A child's early efforts are so painful to him that he emerges from them with a fixed fear of words and a feeling of panic toward the whole matter of speech. It is not long before he discovers that his fear of words and his inability to speak them are ruinous handicaps in his efforts to attain status among his age-mates, or to make progress in school. Times without number he experiences the frustration of knowing the answer but being totally unable to give it after his teacher has noticed his wildly waving hand and called upon him.

Most healthy, vigorous children now start to fight back in earnest, a step that precipitates them into the class of secondary stutterers and stammerers. They notice that if they take a deep breath, they don't stammer, so they take a deep breath before every third word—thus interrupting their rhythm still further—and in a week's time they have achieved an inseparable fusion of stammering and deep breathing. Or perhaps they notice that balling their fists up tight will reduce the difficulty, in this case, they fuse muscular rigidity with their stammer. Others bat their eyelids together five times, or twitch their shoulders, or pat their stomachs, or open and close their mouths, whatever the mannerism, it is soon tacked on and becomes part of the stammer. The initial effect of such efforts is almost always so good that most stutterers experiment with and acquire several mannerisms before abandoning this mode of approach. The good result comes, not from the gesture or other form of preparation, but from the diversion of attention. For a few days the child must remember to complete the gesture before speaking, and he is so busy patting his stomach that he starts to speak without thinking about it, and therefore loses his defect. Presently, however, the patting gesture becomes so automatic that his attention returns to his speech, and then he is worse off than before: now he has both a stammer and a mannerism. Moreover, they are so fused together that without the mannerism he cannot speak at all. He now begins what is likely to be years and maybe a lifetime of the same unpleasant experience repeated *ad infinitum*: before he speaks he becomes obsessed

with a fear of the words themselves, while he speaks he feels utterly helpless and deeply frustrated, and after he is again silent he suffers from his social inadequacy, from a fear of ridicule, from acute self-consciousness and embarrassment, and from a hopeless sense of permanent inferiority. At the onset of adolescence, with its powerful social and emotional drives, the stammerer has fresh troubles. He cannot have dates, or go to dances, or even talk to girls in the school corridors. He is usually too self-conscious to play games well, he cannot take a normal part in group discussions, he is rarely asked to join clubs. If he has a bosom friend, it is likely to be another outcast like himself.

The act of stammering is painful to watch. One investigator¹¹ took pictures of 16 adult men and 1 woman during 72 moments of stammering. The results are interesting in showing the tension that accompanies efforts at speech during a block. Sixty-three per cent of the pictures showed tension in the jaws (20 per cent a very high degree of tension) and almost the same proportion showed tension in the muscles of the throat. Strain was visible in every one of the 72 pictures.

It is not surprising that stammerers grow up with personalities that, while within the normal range, differ from those of other people. In general, their personality structure is of the obsessive-compulsive type. They want to talk, they have a great pressure of words inside them, and they experience a constant compulsion to speak, but at the same time they have an obsessive fear of words (which they nurse assiduously and refuse to let go), they still believe, despite much proof to the contrary, in the magic power of particular gestures, and they dread the attitudes of other people toward them.¹²

In general, a stammerer develops one of three different sets of traits, depending upon what kind of reaction he makes after he has become aware that other children avoid him because of his handicap. He may make an aggressive, fighting response, try to domineer over others, show great hostility toward his brothers and sisters, indulge in outbursts of temper, and become destructive in a frantic, disorganized effort to overcome the aversion he has encountered. He may collapse within himself under the continued pressure, withdraw from human contacts, become mute, and trust no one. Or he may continue to hover on the edges of his social group, picking up such crumbs of contact as may fall to him and developing into a shy, dependent, overanxious, unstable person who is both desirous of social contacts

¹¹ J. C. Snidecar, "Tension and Facial Appearance in Stuttering," in Johnson and Leutenegger, *Stuttering in Children and Adults*, pp. 377-380.

¹² P. I. Glauber, "The Nature of Stuttering," *Social Casework*, 34:96-103, E. H. Perrin, "The Social Position of the Speech Defective Child," *Journal of Speech and Hearing Disorders*, 19:250-252, 1954, L. E. Richardson, "A Personality Study of Stutterers and Non-stutterers," *Journal of Speech and Hearing Disorders*, 9:152-160, 1944, F. Walnut, "A Personality Inventory Item Analysis of Individuals Who Stutter and Individuals Who Have Other Handicaps," *Journal of Speech and Hearing Disorders*, 19:220-227, 1954.

and afraid of them, and cursed with a bitter sense of his own inferiority. Stutterers and stammerers of all types tend to have psychosomatic disorders in addition to their speech difficulties¹³

Stutterers show about the same range of IQ's as nonstutterers, but they do inferior schoolwork in terms of their abilities, and they are more retarded in their progress through the grades. Relatively few of them persist into high school, probably because the highly social nature of the modern secondary school makes them uncomfortable. One investigator¹⁴ paired 236 stutterers with an equal number of children with normal speech, of the same age, and with the same IQ. The grade placement of the two groups is shown in the following table

	<i>Stutterers</i>	<i>Nonstutterers</i>
Per cent accelerated (1-3 grades)	9	20
Per cent at grade for age	48	46
Per cent retarded (1 to 4 grades)	43	34

This particular school seems to have had a rather high degree of retardation, by modern standards, but the stutterers still show to their disadvantage when compared with normal children of the same intellectual level.

Any constructive treatment for stammering requires a long time and usually involves a change in a child's entire life. So far as direct treatment of the defect is concerned, there is nothing that a teacher can do or should attempt to do. She can, however, make some indirect contributions that may be of vital importance. She can begin by bringing about a change in the attitude of the other children toward the stutterer—making her explanations when he is out of the room. She can also give him the little extra attentions that children all love, can make him feel accepted and wanted, can assign to him small chores that do not require speech, and can provide an atmosphere in which he can relax and feel safe. She can protect him from the ridicule or bullying of other children and from her own impatience. Teachers as a group can also contribute to the entire problem of stuttering by getting before all parents, through the parent-teacher association, the main facts about the genesis of speech defects. This procedure will not cure any pupil who already stammers, but it should prevent a

¹³ J. L. Despert, "Psychosomatic Studies of Fifty Stuttering Children," *American Journal of Orthopsychiatry*, 16:100-113, 1946, and B. C. Meyer, "Psychosomatic Aspects of Stuttering," *Journal of Nervous and Mental Diseases*, 101:127, 1945.

¹⁴ Schindler, "A Study of the Educational Adjustment of Stuttering and Non-Stuttering Children," in Johnson and Leutenegger, *Stuttering in Children and Adults*, pp. 348-357.

number of well-intentioned parents and teachers from making stammerers out of normal children. Above all, perhaps a teacher can, by her treatment of each child with a speech defect, take off the "label." One of his troubles is that he feels abnormal, probably as a result of being dragged from doctor to psychiatrist to clinic to specialist *ad nauseam*. A teacher can help him by treating him just as she does every other child in the room and without pinning any labels on him.

Since stuttering and stammering arise largely because children are expected to reach a high standard of speech at too early an age, and are subject to much parental pressure if they do not, it is not surprising that boys, who develop more slowly than girls, furnish the bulk of the stammerers. A particular likely victim is the boy with two or three older sisters, a perfectionist mother, and an indifferent father. Such a mother would probably fuss at him more or less anyway, but her standard has been set by the girls, and she expects her son to speak as well at each successive age as they did. If he is a normal boy developing at a normal rate, he cannot maintain the linguistic speed of his sisters, with whom he is likely to be compared to his own disadvantage. If his father is too indifferent to interfere, the boy has an excellent chance of developing a speech defect. The case history given below illustrates the type of home background that produces stammerers.

Recently, one of the writers had to tell a mother and father that their only son's hope of recovering from his stammering was to leave his home and live with foster parents or with relatives. There is not too good a chance that little Jimmie will recover even then, but at home there is no chance at all. The family group consists of Jimmie, aged eight, an older sister of twelve years, an aunt, the parents, and a housekeeper. The aunt is the mother's twin sister. The two women still resemble each other so closely that the children have great difficulty in telling them apart—a situation regarded by the adults as uproariously funny but found to be highly disturbing to the children. The mother is a self-willed, self-assertive, aggressive woman, who has always dominated her twin and now rules her husband and children. She is rigid in her thinking, conventional in her behavior, unable to relax her hold on anything or anyone she regards as hers, meticulous about her housekeeping, and obsessively perfectionistic toward her children. Both children have been rigidly trained to be neat, to keep their possessions in order, to hang up their clothes, to be unobtrusive, and to do as they are told. In her own way, the mother is intensely proud of them. The father is an overanxious, well-meaning, childish, and futile individual. He overprotects both his children and tries to compensate for their mother's stern handling by coddling them as much as he dares to. The daughter has worked out her own compromise. She conforms on the surface to her mother's requirements, but she dislikes her mother and adores her father. She is sly, deceitful, self-centered, and—aside from her affection for her father—as cold as her mother. Young Jimmie is a confused, dependent, shy, anxious, fearful, frustrated child. Both his parents demand more of him than he

can give. He strains himself to the utmost to meet their expectations, but he knows that he will never succeed. As a result, he feels inferior and insecure. The aunt is a source of confusion to the children, partly because of her physical identity with their mother, partly because there is tension between her and the father, and partly because she has little to do and occupies herself with hectoring the children. The housekeeper is a naturally sympathetic woman, but she has refused to become involved emotionally in the situation. She sees better than anyone else what is happening, and when Jimmie has one of his screaming nightmares she is the only one who can quiet him. At such times he violently rejects his mother.

Jimmie's difficulties with speech began as soon as he tried to talk. Both parents were so eager to have him reach perfection that they pushed him. Jimmie has a normal degree of general intelligence, but his linguistic ability is definitely low and his vocabulary small. His first reaction to being high-pressured into speech was to become mute for hours on end. These periods drove his father frantic with worry and his mother frantic with frustration. Moreover, he was punished for them. Since his first solution met with so bad a reception, Jimmie took refuge in a stammer. Even his mother reluctantly admits that discipline and punishment are of no avail in controlling the stammer, but she does not know any other method of approach. The father tried rewarding his son for each perfectly spoken sentence, but this method backfired, because Jimmie worked so hard to get the reward and his father's approval that he stammered worse than ever. His sister adds to his troubles by furnishing a contrast in fluency and by giving him many a sly dig that passes unnoticed by his parents. She regards him as a competitor for the father's love and has no intention of letting him trespass on her preserves.

Jimmie has recently shown a tendency to remain in the kitchen with the housekeeper, playing quietly and wordlessly in a corner. It is probable that he feels secure there, since she asks him no questions and makes no demands upon him. The woman has a friendly attitude toward Jimmie, but she also has a genius for minding her own business. It seems to the writer that the boy's one hope for recovery is to go away from home, preferably with the housekeeper, for a trial period of at least a year, as a means of finding out what mere relief from pressure will do for him. During the trial year he should not see his parents. If an arrangement with the housekeeper is impracticable or if the parents are unwilling to let her and him alone, he could be sent, young as he is, to a boarding school at a considerable distance from home, but unless the school is selected with great care, he is likely to get worse rather than better. He needs a permissive atmosphere, careful guidance, an absence of pressure, freedom to develop his excellent mechanical ability, and general emotional security. If left to themselves, his parents would be likely to choose a military school with strict discipline and conventional methods of instruction, thus perpetuating the worst features of the home. It remains to be seen what action will be taken. The father is deeply concerned about his son and is willing to sacrifice his own pleasure in seeing the boy every day to the lad's present and future development. The mother, however, cannot admit failure, like other dictators, she has to be right all the time. If she can think out a rationalization that absolves her from blame, she may agree to a separation. If Jimmie remains within his present family group he is not likely to stop stammering.

Orthopedic Disabilities

The term "orthopedic disabilities" describes those types of disability that arise from the paralysis, malformation, or limited use of some part of the body. The recent wars have emphasized the problems of amputation, paraplegia, and the use of artificial limbs. In most ways this emphasis has served to bring about a healthy acceptance by the general public of handicaps that were formerly regarded with horror. However, the disabled adolescent does not often benefit from the aura of drama and self-sacrifice that surrounds the war-injured.

Although it is true that the adolescent with a shrunk arm or a missing hand faces some special problems of "differentness," he has certain advantages over the less obviously handicapped youth because his reasons for limitation are clear to everyone. If he succeeds in making a good effort to use what abilities he has, he is given a role of honor in his group. Moreover, he is generally in good health. One of the writers knew a boy with one badly damaged hand who became his school football team's expert place-kicker, someone else held the ball for him, and there was nothing wrong with his feet. In dealing with orthopedic handicaps it is important to know at what point in the adolescent's life the disability occurred; adjustment mechanisms of the youngster who has grown up with his handicap are quite different from those of the pupil who has been abruptly confronted with a handicap after a frightening illness or accident. The following brief case studies illustrate some aspects of this difference and also offer two patterns of solution.

Sid M. is now in his middle forties, a man much respected and secure in his difficult position of coordinating research in biochemical and medical investigations of cancer. Probably no colleague and very few friends would, in describing Sid, think to mention the fact that he has a disfiguring, congenital physical disability—a shoulder so hunched that all his clothing must be custom-made, plus a nearly useless left hand. At his present level of adjustment these handicaps simply do not enter the picture of what this man "is" to most people. Blessed with high intelligence and an accepting family, Sid found social standing, an adequate economic role, and warm affectional ties throughout his life. During his early college life he not only studied seriously but attracted a number of younger students who looked to his relative wisdom and open kindness to support them in their own wavering emotional and intellectual problems, and he learned very early that by simply sitting quietly and radiating personal warmth he could become as much of a "hero" as the athlete. He was rather less successful in the early stages of working out his sexual problems, because of the inescapable physical facts and his extremely close ties to his mother. For several years after graduation from college he denied his needs for the physical and emotional satisfactions of marriage. However, one semester, a homely, utterly charming, and overwhelmingly enthusiastic young instructor joined the faculty of the institution where Sid was immersed

in research, and Sid's bachelorhood never stood a chance in the face of that warm-hearted dynamo. Their marriage has endured solidly, and not merely because they are both in a sense handicapped, but more significantly because both were able to express the very real abilities they possessed. And in Sid's case at least, those abilities were nurtured and encouraged by the schools he attended.

Ellen, who is now nearing eighteen, faced a very different problem, although her actual physical liabilities are much less. At fifteen she was a pleasant-looking girl of ordinary abilities, with a fairly stable personality, she also had a boy friend with a sports car. One week and one seventy-mile-an-hour joyride later, she was a mangled body by the roadside, her face sliced by windshield glass, her arm torn out of its socket, her side burned by exploding gasoline, and her boy friend dead beside her. It is a remarkable tribute to modern medicine and the toughness of the human body and spirit that Ellen was back in her high school six months later. To be sure, she was back with her shoulder in a body-splint, her neck contracted with burns, and her emotions shaken by terror, sorrow, fear, and a vague sense of guilt. She was healthy enough, and she had only one tiny scar on her mouth and the ugly marks of the burns on her throat. This was the beginning, not the end, of Ellen's recovery. Assisted by the school social worker, who encouraged her and her family and helped arrange for financial aid, she faced the long, tedious, painful therapy of correcting the scars from the burns. The school nurse, in consultation with the orthopedist in charge, kept an activity program for Ellen under constant supervision as the neck and arm healed. But it was in the classroom that an important phase of recovery was taking place, through the aid of a perceptive teacher. One day when the class was discussing safety precautions, the teacher asked Ellen before the class started if she would like to take part in the discussion. It was left entirely up to Ellen what she would say, or if she would say anything. The time was sensitively chosen by the teacher. Ellen was ready for this phase, and she became something of a heroine by standing up and relating to her classmates some of the circumstances of her own injuries. Gradually, the layers of guilt and differentness peeled off from at least her behavior with her schoolmates, as she became active in the school's safety program.

After three years Ellen still has many problems, although her physical progress has been so excellent that she no longer has much physical limitation. Possibly because her mother—a strikingly lovely woman—is very much concerned about appearances, Ellen is not able to accept the minor burn scars and nearly invisible mouth damage. She has rejected marriage, probably not only because of the scars but also because of her unresolved feelings about the accident. She is living for the day when she can earn enough money to pay for plastic surgery so that she may “look normal again.” Since she has the energy and ability to help herself in this way, she will probably achieve a good adjustment in later adulthood.

Some orthopedic disabilities, in contrast to the congenital and accidental origins, come from active illness, such as arthritis, cancer, muscular dystrophy, and poliomyelitis, which affect bone, nerve, and muscle either during the disease or as an after effect. The acutely ill pupil is, of course, not in school, but many of these somewhat disabled children are well enough

to attend school intermittently. As the years go by, it is to be hoped that there will be fewer "postpolios" in the schools.¹⁵ However, those already affected by the disease are not rare in the schoolroom, and the teacher needs at least to understand that it is useless to urge these boys and girls to "try harder." The damage they have suffered is permanent, and after the first year of therapy they attain all the physical capacity of which they are capable in the affected area, although development continues normally in the unaffected parts. A fairly recent study indicates that there is little behavioral effect after "polio," if serious crippling does not occur, and no necessary personality involvement after the acute stage is over.¹⁶

In handling children with chronic physical handicaps the teacher should try to avoid frustrating situations as much as possible, because such children tend to react as if the threat were the situation itself, and thus to become far more disturbed than they would if they were normal.¹⁷ It is therefore essential that the teacher avoid situations in which a pupil's disability puts him in a markedly inferior position or in a potentially frustrating one.

Medical Conditions and Chronic Illnesses

The general heading of this section covers such deviations from normal health as tuberculosis, anemia, diabetes, allergies, heart conditions, nervous diseases, and digestive disturbances. Of course, the pupil who is acutely ill with any of these conditions is not in school, but the teacher often has in her room at least one pupil whose activities are limited by a chronic condition which is due to one of these diseases.

Although the incidence of tuberculosis has been greatly reduced in the last quarter century,¹⁸ it remains a significant health problem at the adolescent level. There is still no cure, but the progress of the disease can be arrested, often for many years. The teacher's concern is mostly with the adolescent who has returned from treatment. He is no longer any danger to others, only to himself, because of his susceptibility to fatigue. He cannot keep up with the whirlwind of his classmates, and he is further handicapped because his ailment does not "show." He needs intelligent guidance, and

¹⁵ Nation-wide estimates on the effectiveness of Salk vaccine indicate an 80 per cent reduction of crippling polio in vaccinated children.

¹⁶ E. L. Phillips, I. Berman, and H. E. Hanson "Intelligence and Personality Factors Associated with Poliomyelitis among School-Age Children," *Monographs of the Society for Research in Child Development*, Vol. XII, no. 2, 1947.

¹⁷ C. Smock and M. Cruickshank, "Responses of Handicapped and Normal Children to the Rosenzweig Picture-Frustration Study," *Quarterly Journal of Child Behavior*, 4: 156-164, 1952.

¹⁸ The estimated current rate of reduction in reported cases to the Public Health Service is about 3 per cent per year, as of the 1954 Report of Health Welfare and Education.

teachers can be of much service in maintaining the activity level recommended by the physician. This is one type of pupil who cannot safely be stimulated or pushed, he often has to be guarded against himself. It is also essential that the best possible vocational guidance be given since the young person with arrested tuberculosis faces a lifelong handicap if his steps are not directed toward a vocational goal that is within his physical capacities. In schools that are located in economically inferior districts, the teacher can sometimes recognize the pathological fatigue and the malnutrition that are the forerunners of tuberculosis, provided she can rid herself of the old assumption that a tall, slender, hollow-chested, gaunt young fellow is the most likely candidate for trouble, his difficulties may be mainly postural. Recent research has shown that the disease is not associated with any particular body build.¹⁹ Although the prevalence of tuberculosis has been greatly reduced, there are still 1,200,000 cases in the entire country—over four times the 1950 population of Wyoming.

In most high schools of any size there will be one or two pupils that are borderline cases of anemia. Their symptoms are such as to pass almost unnoticed, mainly, they are apathetic—even toward things that have previously interested them—and they get tired too soon. A thorough program of preventive examinations will locate these pupils with no difficulty, but where there is no such program, the burden of suspecting something wrong falls upon the teacher. These adolescents present no trouble in the schoolroom because their vitality is too low.

The pupil with diabetes—and there are always some, since the total estimated number of persons suffering from this condition is 3,000,000,²⁰ of which 15 per cent are children or adolescents—is under the strain of having a physically limiting disease that is not at all obvious to his age-mates. It is, moreover, a condition that makes the vigorous life of the typical adolescent rather difficult. Diabetic pupils need help in meeting their own feelings of defeat and in working out a program that will bring them the respect of their peers without further endangering their own health.

One interesting study, covering sixteen months of research with 58 diabetic children,²¹ investigated the personalities of the pupils while they were under care for their physical condition. One significant pattern that emerged from the study was the tendency for diabetic children to give the appearance of much greater maturity and control than they actually felt. Because of their condition, these children must learn very early to take an

¹⁹ R. B. Barker, *et al.*, *Adjustment to Physical Handicap and Illness*, Social Science Research Council, 1953, p. 159.

²⁰ H. Sparks, *Easing a Life Sentence*, 1958. From a radio address, on materials furnished by Doctors Solomon and Brown of the Medical School of the University of California at Los Angeles.

²¹ E. M. Bennett and D. E. Johannsen, "Psychodynamics of the Diabetic Child," *Psychological Monographs*, no. 382, 68:23-25, 1955.

active part in both medication and diet, they therefore learn the outward forms of control and restraint before they are able to meet the imposed emotional strain adequately. Teachers should be very cautious in pushing such a child and should give what support they can to help him meet his problems. If there is in a schoolroom a pupil who becomes easily fatigued, trembles, sweats, and is constantly trotting to the water fountain, a teacher would be well advised to send him to the school doctor for examination.

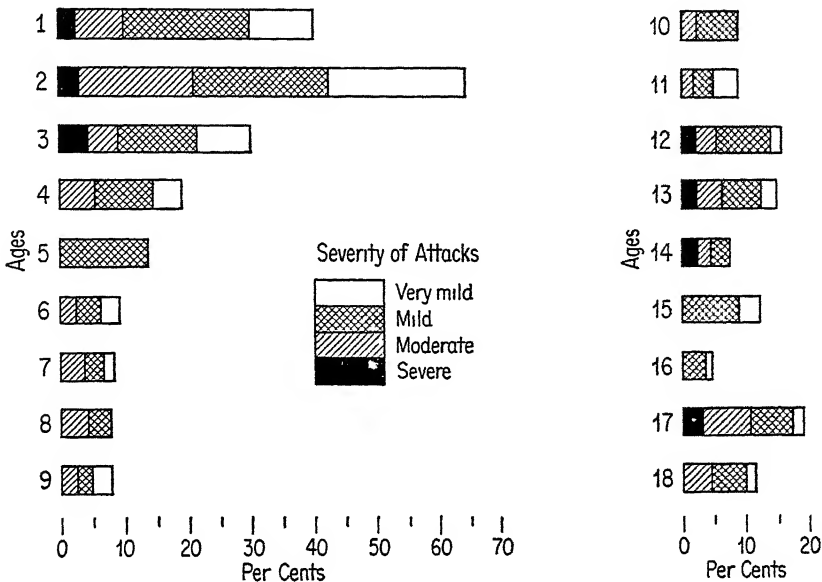


Fig. 56 *Per Cent of Boys Showing Allergic Reactions at Various Ages*

Based on L. M. Bayer and M. M. Snyder, "Illness Experience in a Group of Normal Children," *Child Development*, 21: 105, 1950

Most children with allergies show their reactions at an early age. Thus, in a group of 80 children who had allergies after their fifth birthday, 83 per cent had had at least one attack before they were five. This early appearance of symptoms suggests a constitutional predisposition, since attacks are often "triggered" by psychological factors, it indicates an early emotional conditioning as well. The types of allergy seem to vary somewhat with age. Hives and exzema predominate in early childhood, and hay fever and asthma during adolescence. Figure 56 shows the incidence and severity of allergic attacks among boys between the ages of one and eighteen. The worst period is during infancy, but there is an upswing of breathing difficulties during adolescence. Results for the girls are not significantly different, except that they average 5 per cent lower throughout the age range studied.

Because allergies are likely to pop up in a form that is both dramatic

and upsetting to the victim, the class, and the teacher, they are rarely overlooked. The pupils who have them are often thoroughly miserable. Also, they are under the necessity of taking preventive measures when they appear to be perfectly normal—such as refusing to go on a picnic with their friends because they know they will have hay fever before the day is more than begun. Neither the diabetic nor the allergic adolescent can get his age-mates to understand the nature of his difficulty: the causes are too special and too technical. The best explanation he can give will not convince them that he is really sick at such times, for there are no overt symptoms.

An illustrative case from the clinical experience of one of the writers is typical in both its course and the interweaving of physical and emotional problems.

Jenny was seen in an allergy clinic at the age of twelve. She was in good physical condition except for a mild degree of malnutrition and scars on her forearms that indicated previous skin problems. The child sat on the edge of her chair and listened while her mother expatiated upon her "difficulties with Jenny," alternately weeping and being quite apathetic about the whole thing. It soon appeared that the mother was unhappy about her separation from her husband, she found it difficult to face the day alone after Jenny had left for school. Previously, the child had had rashes on her arms from eating eggs. As she grew older she could tolerate a small amount of egg in such food as puddings or cakes, but from time to time she still had a rash. Even more significant was her violent scratching of her arms whenever the emotional tension in the home became unbearable. At such times her arms had to be bandaged to prevent infection. Jenny had been miserable at school because of her conspicuously bandaged arms, for which she could give no rational explanation, and had developed a hearty dislike for the classes she had previously enjoyed. The mother was too wrapped up with her own troubles to do much more than give Jenny a reasonably adequate diet, and she had a tendency to cling to her daughter whenever her own difficulties with her husband became acute.

During the junior high school years Jenny had had a respite from her allergies, but, shortly before the beginning of her freshman year in high school, her father abruptly deserted the family. Jenny's mother, totally unable to manage a job and her child simultaneously, applied for assistance, and at this time the family came to the attention of the clinic. At the same time, the school truant officer talked with the clinic, because Jenny's mother had requested a home teacher for her daughter on account of her "physical handicap." Actually, Jenny's teachers were finding it almost impossible to keep the girl in school in spite of her good work. About the middle of the morning on the average of three days a week, she had violent attacks of asthma although she arrived at school apparently well.

After medical, school, and other reports were co-ordinated at a staff meeting, it was agreed that a home teacher should be requested for Jenny, with the understanding that the mother would work toward the goal of letting Jenny attend a six-week session of summer school. It was necessary to recognize the mother's need for the girl's presence at home, even while initiating counseling to help her accept

her daughter's maturing independence. It was also necessary to relieve Jenny of her sense of guilt in leaving her mother, a feeling that seemed to be the trigger for her genuine allergy reaction. Success in reaching the long-range goal of a normal school life for Jenny will depend upon the ability of the family to solve its emotional and medical programs, together. Jenny must have a chance to establish normal peer relations, as well as to clarify her attitudes toward her mother. She also needs rest. Therefore, the home teacher is a part of the process of rehabilitation, not a permanent solution.

Nervous diseases are particularly baffling to those who do not have them—and even to those who do. Only two will be discussed here—epilepsy and chorea (St. Vitus's dance). As modern treatment of epilepsy improves, more and more of these children are able to attend the regular schools, especially at the secondary level. Few illnesses present as dramatic and difficult a problem for class, teacher, and victim as does a *grand mal* seizure of epilepsy, which is terrifying to the other pupils, embarrassing for the victim, and profoundly disorganizing to whatever work is in progress. A watchful teacher can do a good deal to prevent these crises, because most epileptics have at least a brief period of warning, during which prompt action by the teacher can relieve much of the strain for everyone. Almost all children with epilepsy can be aided to some extent by medication. The condition is not cured, but the seizures usually become less frequent and less violent. For both the development of the pupil and the peace of the class a teacher should lose no time in sending an epileptic child to the school doctor for appropriate treatment.

Aside from the problem of seizures, the teacher can help both the pupil and his family to accept his handicap. Often parents cannot themselves regard the matter with calmness, and their emotional state brings about insecurity and rejection, which in turn may increase the frequency of the seizures. A teacher can sometimes arrange a referral of not only the pupil but the entire family to a suitable counseling service. In a study at the Massachusetts Memorial Hospital²² it was found that the views of parents concerning the illness and proper handling of their epileptic children were not only actual misconceptions but were also a reflection of their own emotional problems and especially of their feelings of guilt in their conscious or unconscious rejection of the afflicted children. Teachers also need to be aware of their own feelings and to be careful not to add another rejection to those of parents and classmates. The condition itself is a medical problem, but the attitudes toward it are often more distressing than the disease. A teacher can, as opportunity arises, advise parents to get in touch with the National Epilepsy League in Chicago as a means of obtaining information and help. Also, in many communities there are groups of epileptics who

²² L. A. Hartman, "Responses of Parents to Patients with Seizures," *Smith College Studies in Social Work*, 25:81-84, 1951.

have organized clubs with the objective of helping the community to understand their problems. While it is true that the disease appears more frequently among dull individuals, many epileptics are of average and even superior ability. One of the writers remembers an especially inspiring teacher who had a *grand mal* seizure about once every five or six years but was otherwise a gifted and fascinating person.

Chorea is also an easily recognizable disease in its acute form, but milder types may remain undiagnosed for years. The most noticeable symptoms are the tics—that is, involuntary twitching of the face, arms, or shoulders—and a general malco-ordination of the entire body. A pupil showing such symptoms, which sometimes appear only under stress, should be sent at once to the school physician. The milder forms, with an occasional, more serious episode, may run on for years, as shown in the second history given below.

These two case studies give brief descriptions of the kind of symptoms and reactions that may well lead a teacher to suspect a nervous disease. It should be noted that both the epileptic and the choreic child had difficulties of social adjustment that were secondary results from the illness. The general public probably has less understanding of this type of handicap than of any other, some people even going so far as to confuse nervous diseases with mental derangement.

It was the observation and concern of a seventh-grade teacher that led Nora to medical treatment before her problem became a major handicap. She had always been a quiet, rather reserved child who did not discharge her emotions easily, and the various disturbances of her early years had piled up inside her, long before there was any outward manifestation of them.

Nora's father had deserted the family when she was three years old and a younger sister was two. Her tense, overprotective mother suddenly found herself unable to provide for two small children and was forced to place them in the care of an elderly relative so that she could take a full-time job as a housemaid. The relative was fairly willing to have the two little girls with her, but she was physically not able to endure the noise they made, so she repressed them to a level of quiet that she could stand. One day Nora rebelled against the pressure and ran away from home. Presently she fell into a drainage ditch, was rescued by police, and sent to a hospital for treatment and observation. At this point the mother quit her job, went on relief, and took her two children home with her.

For the next few years Nora's life proceeded fairly normally. She did moderately well in school and presented no serious problems. But she was always overdevoted to her mother and not successful in her contacts with her age-mates. When she entered the junior high school she had reached the ugly duckling stage of development, and she began to feel ashamed of her faded but neatly mended clothes and of her residence in a run-down section of the town. Her schoolwork began to get poorer and her social contacts poorer still. At first, her mother was mainly irritated at what seemed to her a criticism of her best efforts under trying

circumstances, and she was too occupied with her own troubles to notice how sick Nora was. The girl's teachers, however, not being personally concerned, did not fail to notice that Nora sometimes "fell asleep" for a few minutes, that she occasionally wandered into the wrong room, that she complained of being sick to her stomach but seemed more confused than nauseated. Finally, Nora wandered into the boys' toilet in one of her moments of mental fog and was sent to the principal for "discipline" by a teacher who did not know her. Eventually, she reached the school nurse, who also felt that something was wrong, but suggested a week of rest at home. This plan was followed. At the end of the week, the mother thought Nora was well again, and the child returned to school without having seen a doctor.

Through the efforts of the local PTA, the school had obtained funds to give each child a two-week vacation in the mountains. When Nora's turn came, she went with a group of boisterously happy adolescents to a camp where, in the noisy, enthusiastic company of fifteen age-mates she felt herself rather isolated. One day she went on a long, hot hike that exhausted her. Shortly after her return to camp a counselor found her standing in the blazing sun by the lake, with her clothes wet and wrinkled and blood on her mouth. Two hours later she was in an emergency room of a children's hospital.

The emergency doctor could find nothing obviously wrong, and by the time Nora and her mother had talked the matter over, Nora had made up a story about falling off the dock. She was afraid to tell anyone that she could remember nothing of what had happened. This episode would have come to little had the school counselor not happened to drive mother and daughter home from the hospital. This friendly adult soon observed the emotional barrier between her two passengers and decided something should be done before matters got worse. So she called upon the help of the hospital's social worker, and together they gathered all possible information about Nora. When the teacher, the nurse, the social worker, the camp counselor, the school counselor, and the doctor had the materials before them, the picture that emerged looked very much like epilepsy. The group recommended that Nora should have a complete physical examination, but it was a month before the mother could be persuaded to take her daughter, who seemed to her "perfectly well," to the clinic. The electroencephalogram confirmed the diagnosis of epilepsy, probably caused by brain concussion—perhaps when she fell into the drainage ditch. Subsequent medical treatment proved effective in controlling the seizures. Both the school psychologist and the medical social worker helped mother and daughter to an understanding and acceptance of the situation. Under this improved care, Nora is returning to school. She will probably always need medication, but she can expect to have a reasonably normal life.

It should be noted that a great many people and agencies were involved in obtaining relief for Nora, also, that the teacher was the first person to sense that something was wrong. However, she should have reported her observations to the school's medical personnel, so that when Nora wandered into the boys' toilet, an already alerted nurse would have been able to make a better assessment of the situation and would probably have gotten Nora under treatment two or three months earlier. What many schools still lack is some routine procedure by which the observations of teachers and other school personnel can be co-ordinated. One of the writers recalls working on a supposed case of truancy some years ago, in the

course of which it turned out that the "truant" absented himself because he was in the toilet having nosebleeds—a fact of which the janitor had been aware for six months, but had not known to whom he should speak about the matter

The following history was selected because it covers an entire life span. The individual described is now a woman well over sixty, and the long history of a life of nervousness, without emotional involvement, should be instructive. This woman came from a family in which rheumatism in various forms was common, she herself has had inflammatory rheumatism, sundry attacks of shingles, and has not been able to sit at a desk since her college years because of ever-present neuritis in her shoulders.

Cecile Marie was from birth a somewhat overactive child, but she was normally healthy until she was about four and a half years old. About six months earlier her mother had become ill and was slowly dying. The child was so active and talkative that she was too much of a problem to her ailing mother, so Cecile Marie was sent during the day to a nearby private school. The teacher usually accepted only children in the kindergarten or first and second grades, but she thought Cecile Marie, being intellectually advanced for her age, would be able to do kindergarten work without trouble. The child adored the school and could not get there early enough or remain long enough. She worked unremittingly at such chores as paper weaving, sewing designs on cards, coloring pictures, or stringing beads. Her work was excellently done, but the teacher evidently did not notice the intense effort needed for a child of barely four to complete assignments designed for six-year-olds—and by modern standards too hard for them—nor was she otherwise than pleased that Cecile Marie listened to whatever the older children were doing, learned to read, and memorized everything she heard, whether she understood it or not. Her father, upon whom her care had devolved, was a little disturbed by his small daughter's insistence upon going over and over her new acquisitions each evening after she went to bed—reciting poems or multiplication tables, spelling words to herself, and so on, by her difficulty in getting to sleep, by her nightmares, and by her obvious feelings of compulsion about her schoolwork. During the five months that she attended the school, Cecile Marie lost weight steadily, her facial muscles began to twitch, her hands could no longer do the fine work they had done earlier, her vision was often foggy, and she was unable to remain still for more than a few seconds. The climax came one evening when her temperature soared and she began to have convulsive spasms. The doctor had no difficulty in diagnosing chorea (St. Vitus's dance). The acute symptoms lasted only a few days, but it was a year before Cecile Marie could live even a fairly normal life, and she still had many tics and mannerisms, which became worse if she were subjected to strain. Her face then contorted every few seconds, her arm and shoulder muscles twitched, and she never knew what results her shaking hands would produce.

When Cecile Marie was six, she entered the first grade, but by the end of the second week she had another attack of chorea. Thereafter, each autumn, when the other children went back to school, she accompanied them for only a day or two, by which time she was so tired that she willingly remained at home. She was eighteen years old before she was able to attend school regularly. In the inter-

vening years she followed a quiet routine breakfast in bed and study in bed until about noon, lunch with the Chinese cook who spoke little English and believed that small children should be silent at mealtimes, an hour's rest after lunch, and then more reading until 3 15, at which time she set out to meet the neighborhood children on their way home from school. With them she played until five o'clock and then returned home to take a prolonged hot bath to quiet her twitching muscles. Then back to bed for supper and some quieting occupation, such as a puzzle or a game of solitaire, until "lights out" at seven-thirty. It was midnight or later before she got to sleep.

From time to time, Cecile Marie had a tutor who came to the house three times a week, but even this small stimulation was found to be just the extra load that she could not carry, hence most of the time she was given assignments by her father or grandfather. At about the age of twelve, at her constant urging, she was allowed to register for one course at a nearby private school, where she received individual teaching three times a week for an hour. This work she loved dearly, but it precipitated a third attack of chorea. After that, there was no more formal schooling until, as an almost full-grown woman, she had sufficient vitality to attend classes with reasonable regularity. Her progress was made even more difficult by persistent recurrences of rheumatism of an inflammatory character, from which she is rarely free.

At no time was this child an emotional problem. She found plenty to do at home, she was comfortable, happy, loved by her family, reasonably popular among her age-mates, and completely unconcerned about the differences between her daily life and that of her friends. To be sure, there were many times when she wanted to do something that she was not allowed to do—to go on an all-day picnic, for instance—but her naturally cheerful temperament soon triumphed over these minor catastrophes and she was her normal self within a quarter of an hour. Her schoolwork at home was interesting (she had two remarkably able teachers in her own family), she had time to read in her father's extensive library—and was unable to read "trash" because none was there—and she always had a period of playtime with her age-mates. The bond with the other three girls who made up her little clique was so close that forty years later they still exchanged letters and visited each other whenever possible. Cecile Marie was not maladjusted, unstable, or unhappy, she was merely sick and nervous.

Throughout her life this woman has had to follow a somewhat restricted routine in that she could not constantly be with people. She has twice resigned jobs that she liked because the continuous presence of other people made her irritable and tense. She must still spend some hours of the day alone. Her friends know that when she visits them she will stay in a hotel, and they understand that this procedure does not reflect upon them but is dictated by the need to be alone for part of each day. She is a stable, well-adjusted person who takes life as it comes and rarely fusses about anything. As long as the pressure is kept low, she shows only a slight superficial nervousness, but tension soon brings back the tics. It is characteristic of her lack of general emotionality that she was a tournament golf player for some time and was never afflicted with the kind of emotional stage fright that bothers many people. Cecile Marie is an excellent example of a person who is merely nervous, without emotional complications.

The adolescent with a "cardiac limitation" is not uncommon in the classroom. Thus, a recent survey of college students showed 4 in 1,000 students to have a heart disease²³. In the earlier years of adolescence the incidence is likely to be higher. In this age group many of the conditions are functional and will improve with a few years of proper care. This type of physical deviate has an especially hard problem because he has to go slowly among peers who are going full-speed ahead. Also, he does not usually either feel sick or look sick. He is truly disabled, and without assistance in adjustment he is likely to become crippled—not by his physical condition, but by his emotional reactions of resentment, fear, or dependency²⁴. What such a child needs above all is guidance into such activities as are possible for him, through which he can gain a respected place among his age-mates. He cannot be a football hero, and he cannot be editor in chief of the school magazine, but there are other less strenuous and quite satisfying activities in which he can be successful and through which he can make his contribution to the life of the school²⁵. The central problem is to keep his necessary limitation from turning into frustration and despair.

Teachers are also sometimes the people who recognize the meaning of premonitory symptoms and send a student to the school physician, with a resulting diagnosis of heart disease, long before the matter has become critical²⁶. The most obvious symptom is a failure of breathing to return to normal after a recess or noontime period, during which the boy or girl has been running about. All the pupils come back into the classroom in a more or less breathless state, but the one with an inadequate heart goes on panting much longer than anyone else.

Skin Conditions

Physical handicaps do not need to be of a serious nature, medically speaking, to constitute a real problem for the individual concerned. Pimples and boils are not merely infections, they are emotional hazards. Probably nothing so ostracizes an adolescent as a rash, an outbreak of pimples, or some other skin condition. The mere lack of ordinary physical attractiveness can also be damaging to an adolescent, as indicated in one of the case studies below. Sometimes disfigurement is of a more enduring type. The adolescent who is marked by scars, by any of several congenital

²³ A. Goggio, "Heart Disease in University Students," *Annals of Internal Medicine*, 37:155-163, 1952.

²⁴ J. Newman, "Psychological Problems of Children and Youth with Chronic Medical Disorders," in W. M. Cruickshank (ed.), *Psychology of Exceptional Children and Youth*, Prentice-Hall, Inc., 1956, pp. 391-440.

²⁵ L. Bellak and F. Haselkorn, "Psychological Aspects of Cardiac Illness and Rehabilitation," *Social Casework*, 34:483-489, 1956.

²⁶ S. J. Robinson, A. Potter, and D. M. Aggelek, "Undetected Heart Disease under the Teacher-Observation Method," *Journal of School Health*, 25:172-174, 1955.

malformations of the features, by birthmarks, by large and badly placed moles, and so on, is in a most difficult position in his or her social life. The young are not noted for their diplomacy, and compassion develops only with maturity, the peers of a disfigured child are likely to be less than helpful unless they are themselves helped by an understanding adult. Such conditions may make a pupil feel that he is not normal and never will be, that his appearance is offensive to others, that he will be rejected if he makes advances, that he is an outcast. He develops these ideas because of the reaction of others to him. The teacher can personally be of great assistance to the disfigured pupil, and as an influential adult leader she can do much to get him accepted by the others, provided she herself accepts him. Some of the basic problems can eventually be solved—as in the case below—and some cannot be, but at least the teacher is in a position to make the afflicted pupil's life easier by bringing about a greater acceptance of him by his age-mates and by finding some activity in which he is successful.

Nancy was the youngest daughter of a wealthy family. Her two older sisters were pretty children and grew up to be attractive adolescents. Both attended a socially excellent boarding school, where they did mediocre work but were popular and had a good time. Both girls had expensive debuts, and both are now married. Nancy was a homely and awkward child. By the time she was four or five years old, her socialite mother had completely rejected her. Her father, a successful trial lawyer, was sorry for his ugly duckling and was kind enough to her when he remembered her existence, but he also neglected her, largely because he spent relatively little time with his family and left the upbringing of the three girls to his wife.

When Nancy became old enough to enter school, her father wanted her to be sent to public school, but the mother was unwilling to agree and equally unwilling to enter the child in the fashionable day school attended by the children of her friends. She therefore hired a combination teacher, companion, housekeeper, and watchdog to act as governess to Nancy, sent the two away to the country, and circulated the rumor that her youngest daughter had a tendency to tuberculosis and could not attend school. Nancy and her governess lived in almost complete seclusion until the girl was fourteen. The father saw her about once a month, but the mother not more than two or three times a year. At this point, the governess died, and some new disposition had to be made of a homely, awkward, isolated, sensitive girl. After much discussion, some of which Nancy overheard, the mother entered the girl in a small, obscure, distant boarding school, using the girl's middle name as a last name.

By this time Nancy knew very well that she was a disgrace to the family, that her mother was bitterly ashamed of her, and that her sisters did not wish her to speak to them if she should meet them in any public place. She was also convinced that their estimate of her was quite correct. At fourteen, Nancy was a tall, thin, awkward, homely girl who shuffled along the school corridors looking at her own feet and avoiding as many contacts as possible. At mealtime she sat where she was told to sit, passed the bread or the butter as requested, kept her eyes on her plate,

spoke to no one, and answered only in monosyllables if spoken to. In class her work was brilliant, but she recited with her eyes on the floor and she often stammered when called upon. At this school every girl was required to take part in some sport. At the time of her registration Nancy had been assigned to tennis, in which she turned out to be extraordinarily good at net playing, a talent which she herself did not know she possessed. She made the school tennis team at the end of her first year. Thus encouraged, she went in for various sports and was reasonably successful in several. Because of her superior work in school she was often asked by her teachers to help girls who were having difficulties, and these tutoring sessions brought her in contact with a number of girls who eventually not only admired but liked her.

Although Nancy came from an excellent family, she had been given little or no help in those skills that her mother could most readily have taught her. She did not know how to select clothes, to use make-up, to maintain a conversation, or even to be gracious. During her first two years in boarding school Nancy had to acquire the simple, basic, social skills that she badly needed. Her schoolwork remained excellent, she had reasonable success in school athletics, and she had many acquaintances although no close friends. She continued to wear any clothes that were bought for her by her mother and to throw them on without effort to make herself attractive, although she was always clean and neat. During her third year she was called upon to tutor the most popular girl in the school. The school idol was not long in seeing Nancy's true worth and in becoming her loyal friend. Since Nancy had plenty of money, her new friend simply sent Nancy's clothes to the Salvation Army, spent over \$400 in buying new ones, turned Nancy over for a day to an expert beautician, and convinced Nancy that attention to appearances was really necessary.

What emerged from the week-end spree of buying and self-improvement was an extraordinarily handsome girl, who was not conventionally pretty but was certainly striking. Never again could Nancy be overlooked. With the handicap of her ugliness removed both publicly and in her own mind, Nancy became both happy and moderately popular. Because of her abilities she was encouraged to go on to college. There, in a new environment among people who did not know she had ever been homely, she attained outstanding success. She is now happily married to a man of excellent background. In her leisure time she continues to tutor high school youngsters and works voluntarily with a social agency, taking neglected and rejected children into her own home, where she gives them such understanding and affection that many of them recover. An ironical conclusion to this case history is the fact that Nancy's social status is appreciably higher than that of either sister and she is, at forty, the best looking one of the three.

As a little child Louisa was spontaneously gay and happy, with a great feeling of security in her mother's devotion. She was in kindergarten before her age-mates began to tell her that her face was "funny" or "dirty" or "all purple." Louisa's house contained no mirror, and she had therefore not known that she had a large, dark birthmark across her nose, half her forehead, one cheek, one ear, and her upper lip. Her mother had concealed the condition as long as she could and had almost smothered the child with love to compensate for the defect. The affection had in it an element of compulsion, which made one feel that the mother had

been originally repulsed by the birthmark and was now overcompensating as a means of escape from what she considered an abnormal attitude of rejection. During her childhood Louisa often forgot for hours or even days at a time that she had a birthmark. Once in a while some age-mate made fun of her, but most children accepted her without more than an initial period of inspection prompted mostly by curiosity. With the approach of adolescence, however, and with the development of a quicker perception on Louisa's part, the social situation underwent a marked change for the worse. Louisa discovered that people did not want to look at her because her appearance made them feel ill, and she realized that her childhood chums, now become highly sensitive to social pressures, found her a handicap to their prestige. After a few rebuffs Louisa withdrew from more than casual contacts with age-mates. Louisa went to high school, with the intention of becoming eventually a cataloguer in some library, not because the work attracted her but because it involved working behind the scenes where social contacts would be few. Rebuffed, isolated, and withdrawn, Louisa had reached the stage of asking only for peace and shelter. Then the miracle happened. One day she read a newspaper article about a new make-up cream that hid scars or birthmarks. Secretly and without more than a faint hope of relief, she bought some, and on an afternoon when her mother was caring for a sick friend she tremblingly followed the directions and was completely stunned by the face that looked back at her from the mirror. It was not only free of blemish, it was pretty—except for its petulant expression. Louisa and her mother experimented with the compound for some days, and then, convinced of its effectiveness, the girl changed her plans. She and her mother moved to another city and Louisa went to college, where she eventually became a teacher. Her social success was beyond her wildest dreams, and her personality developed along what were probably its normal lines. She had as many friends and dates as any other girl, and even filled a few minor roles of leadership. Louisa is now a happy young teacher who is understandably successful with "problem" children. She has almost forgotten that she has a birthmark.

Metabolic and Nutritional Problems

More than a few adolescents suffer from malfunctioning of the endocrine glands, although often the condition is only temporary. One type is almost certain not to be overlooked, although the nature of his trouble is not always recognized—the pupil who is nervous, jumpy, excitable, and precocious physically. The pupil at the other extreme is likely to be mistaken for a merely dull pupil because he is apathetic, underactive, uninterested in school, and sluggish in his reactions. Such a child is also sexually retarded. The boys of this type become the butt of none-too-subtle adolescent humor. These pupils are sick, even though they may not seem so to a layman, and should be under a doctor's care. They can usually remain in school, but some adaptation to their condition is necessary.

The main nutritional problems in the classroom—aside from the gener-

ally faulty diet of adolescents,²⁷ with its sequel of inadequate nutrition—are those of overweight and underweight students. The former may have some hereditary predisposition to obesity, but in any case, by the time a child reaches high school the fundamental nutritional problem has been overlaid by a series of emotional maladjustments.

The extremely fat adolescent girl is a very unhappy creature. She is commonly rejected by her age-mates, who are at a stage of development during which they set great store by appearances, and she makes little appeal to boys. Some overweight girls become motherly in their effort to find some possible relationship with boys, and others become frankly immoral, thus obtaining attention of a kind even though it is only a substitute for what they really want. The fat girl needs help from her family, her doctor, and her teachers if she is to find happiness and a normal adjustment. One basic point about overweight should be firmly grasped—that for some reason food has become a weapon against tension and anxiety. The obese girl therefore eats to relieve strain. She comforts herself with sodas, sundaes, cakes, and cookies because she is unhappy, and the more she comforts herself the more she has to comfort herself about! Medical treatment is not the teacher's business, but she can give the fat child a good deal of aid and comfort, without which the best of medication may prove of little avail. The following study may help illustrate the many problems that beset the fat girl or boy.

At the insistence of their high school counselor, Alda and Edna Ramirez, fourteen-year-old twin daughters of a Mexican-American widow, came to a pediatric clinic for treatment of their obesity. The girls were about 5 feet 3 inches tall, and together they weighed an impressive and distressing 470 pounds. Neither the poundage nor the problems were equally distributed, however. Alda, at 230 pounds, had a pretty, alert, smiling face, but Edna's 240 pounds moved heavily and aggressively, and her sullen face reflected her firm conviction that the clinic would impose deprivations upon her already miserable existence. Their mother, who was 5 feet tall and weighed a generous 200 pounds, was baffled by the whole procedure, since overweight seemed to her a natural phenomenon, but she was willing to co-operate to the best of her ability. By her own testimony, she was proud of earning enough as a cook to provide "plenty of tortillas" for her six children and especially proud of the ample results of her feeding where the two girls were concerned.

During their physical examination Alda and Edna gave evidence of emotional problems, so the social worker asked the school counselor for assistance. The counselor promptly collected report slips from each teacher who knew the girls and sent the slips to the clinic. The school nurse was then asked to visit the home and evaluate the nutritional pattern of the family. In the meantime, laboratory reports came in, and the social worker had an hour's talk with the hospital dietitian.

²⁷ K. P. Warnick, S. V. Bring, and E. Woods, "Nutritional Status of Adolescent Idaho Children," *Journal of the American Dietetic Association*, 31:486-489, 1955.

What emerged from the correlation of information from school and laboratory and home visit was a very complex and typical picture of the problems of obesity. The medical evidence was mostly negative, except that Alda might be lacking in thyroid balance and Edna had too high a blood pressure. On both sides of the family there was a history of obesity, the father's relatives tending to be massively built people and the mother's small-boned and short, but everyone seemed to be fat. At school Alda was outgoing, friendly, always laughing, and never in trouble, although her work was barely passing. Edna's work was no better, but she was tense, belligerent, isolated, and a constant problem in class.

Edna had always been the larger of the twins, and before her father's death she had been his favorite—most of the time that is. Perhaps because she was his favorite, he became furiously angry with her when she did not come up to his expectations, hence his treatment of her varied from one extreme to the other. Edna felt her father's death keenly. After it, when the mother had to be gone all day, she became the "man" of the family, thus trying to take his place and to imitate him. Since the care of the four younger children devolved upon the two girls, and since Edna had taken the masculine role, Alda became the "mother" of the brood. As the twins reached adolescence, neither was exactly popular, but Alda was cheerful and good-natured, she brought children home and made quantities of fudge for them, she joked with the boys, and laughed merrily at comments upon her shape. Her social position, although not high, was reasonably secure. Edna, however, furiously resented her budding womanhood, and as she became more and more unsightly, she began to lash out verbally at whoever spoke to her, so as to prevent adolescent witticisms about her size. At school she was thoroughly disliked and thoroughly unhappy.

By night both girls were worn out. They had to collect their younger brothers and sisters, feed them, wash them, and put them to bed—and then get a meal at about nine o'clock for themselves and their mother. By that time they were ravenous and tired. They not only grew larger day by day, they also grew more and more tired, and the more tired they were, the more they ate. Neither of them was able to stop the merry-go-round. They presented a problem for the social-medical team, also, because the eating patterns of the family ruled out the ordinary reducing regime. The girls could cook traditional Mexican food and nothing else. So they ate it—diet or no diet. Also, Edna so deeply resented the intrusion upon her management and was so fearful that all these "outsiders" would rob her of what little comfort she could derive from her position in the family that she was gaining weight, not losing it, because she nibbled extra bits to restore her shattered confidence. Alda, to whom the prospect of being able to wear a size 18 dress made some appeal, did try to diet spasmodically, but she brought down her sister's raging upon her head and in the end found it easier to swim with the current.

Clearly, a more basic program was needed, and the school counselor again responded with help. She had weekly counseling sessions with the two girls and, most fortunately, found the mother a job in the school cafeteria, where her hours would match her daughters' and where she would have a chance to observe the elements of good nutrition. The medical support with adequate drugs and vitamins was intensified and the girls were seen weekly by the doctor. Gradually,

Alda began to respond, and—more slowly—Edna, whose resentments had to become quiet first. Progress is slow for both girls and for their mother, but all three are gradually gaining not only the hope of health and of figures that will give them some chance at normal social relationships, but also a way of living as well as some understanding of themselves that will be of help to them all their lives. Edna still needs intensive psychotherapy, which is not realistic to plan for at present, but she is already somewhat improved in her attitudes. The treatment to date has averted real psychological and physical disaster, and the family has become a harmonious unit working toward goals that it still does not really see. With time and luck these two obese young girls may have normal social and emotional lives before them.

Malnutrition, while less obvious than obesity, is also an adolescent health problem. The most serious cases are pupils who eat enough but are unable to utilize their food properly. The fundamental problem is medical, but if the pupil is in school at all, the teacher has to make adjustments to his needs. Such pupils have probably been semi-invalids for a long time and have the invalid's childishness and dependency. They need help in becoming more mature, but at the same time they need to be sheltered from overstimulation and overexercise. This combination of needs is bad. It often taxes all a teacher's skill to aid these pupils in attaining a more mature personality without involving them in situations that are beyond their physical limitations.

Summary

In the matter of health the teacher has four important immediate functions. First, she should carry out willingly and thoughtfully whatever is recommended by the school or private physician in the interests of a child's best development. In order to get the best results she needs to be herself an accepting person who is able to maintain an even, emotional atmosphere in her room, so that the disabled, restricted, or disfigured pupil can find a safe haven there. Second, the teacher is the person who sees the day-to-day behavior of each child and is therefore in the best position to judge whether or not a given pupil is acting in an unusual way. She has the advantage over the parents in that she is less emotionally involved and in that she sees a far greater variety of children than they do. These two functions are fairly clear and obvious.

Her other two functions are to make outside contacts in the interests of her pupils' welfare. Often, even when parents know that they should consult "someone," they do not know to whom they should go, nor are they able to take the initiative—they feel that such action would brand them as parental failures. But the same parents will usually react positively to a teacher's suggestions and will go to a clinic or counselor for help, if she

makes the initial contact for them. The teacher may also be the best source of information for many cases requiring referral she is likely to be better informed about special agencies in the community than is the average citizen. If there is a school social worker, a school doctor, a school nurse, or a school psychiatrist, the teacher can delegate some of these problems to one or more of them, but where such personnel does not exist, she is the person who should feel herself responsible for bringing a pupil and, if necessary, his family, into contact with the proper specialists.

The pupil with a physical handicap is always under strain, probably in inverse proportion to the obviousness of the handicap. He needs help in growing into a normal individual, and the other pupils need help in developing a sympathetic understanding of his problem. The teacher is in the best position to give the aid these children need, for not the least of their requirements is an appropriate adaptation of schoolwork and alert but sympathetic supervision to keep them from overtaxing themselves. A teacher may also be the only person who can interpose a block in the vicious circle that develops when a pupil's overreaction to a handicap makes his condition worse and thus produces a greater handicap which in turn disturbs him still more, and so on. The pupil's parents may so overemotionalize the situation that their efforts to help him impose additional strain, or they may transfer to him their own tension, even though their intentions are of the best. Sometimes mere acceptance is enough to break the circle, and acceptance plus referral plus treatment stand a good chance of being successful.

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PART TWO

Intellectual Development

8

Mental Growth

Since the very earliest studies of adolescence, stress has been placed upon the characteristic intellectual development of the period. There is such an increase of mental power that subject matter too difficult for freshmen in high school or in college is easily learned by the same pupils when they become seniors. A high school teacher notes also marked increases in judgment, reasoning, comprehension, and memory. Some of the observed development in mental power comes from neural growth, but part of it is doubtless due to the piling up of experience and knowledge. By the end of the eighth grade a child has accumulated a considerable store of basic information and has reduced many simple skills to such an automatic level that he can use them in his thinking. He has, for instance, acquired meanings for about ten thousand words, and therefore has a vocabulary with which to think. Several mathematical skills are now habitual, many elementary scientific facts have been thoroughly absorbed, and there has been considerable experience with cause and effect relationships. The childhood years may thus represent a gradual development of sufficient experience to serve as a basis for more complicated thinking. In many curves of learning one finds long plateaus covering the periods during which basic skills are being acquired. At the end of such plateaus there is usually a sudden and marked rise in learning rate, presumably because of the co-ordination of simple skills without any known neurological development in the learner. This integration of experience, with childhood serving as a plateau, is perhaps one cause of the relatively rapid intellectual development during adolescence.

The present chapter begins with a brief discussion of the nature of intelligence tests and the ways in which the scores from them are generally expressed. Almost all work in the development of intelligence is based on test results, so it seems desirable to give a background for understanding the values and shortcomings of these measures. There is also a discussion of the various ways in which results from tests of intelligence may be expressed. There follows a consideration of the variability in the IQ and of the effects

of environment upon the development of intelligence, as measured by tests. The last section includes data on the growth in intelligence for groups and for individuals.

Obviously, the two most important questions about a test of intelligence are "What does it measure?" and "How accurately does it measure?" The first query refers to the test's validity, the second to its reliability. In order to estimate whether or not a test is valid—that is, whether or not it really measures what it is designed to measure—one has first to come to some conclusion regarding the nature of intelligence. At least three points of view are possible, as summarized below:

- 1 Intelligence is a separate entity consisting of inborn elements only, and is independent of emotional, educational, and environmental factors.
- 2 Intelligence is a separate entity consisting of inborn elements, but it can be influenced by emotion, education, and environment.
- 3 Intelligence is an integral part of the total dynamic functioning unit called personality and is interdependent with emotion, education, and environment.¹

The first assumption is the oldest one. If one believes it to be true, then one supposes that intelligence is determined entirely by heredity and is unaffected by anything that happens after birth. Thus, if one child is very bright and another is very dull, the distance between them could not be reduced by emotional upsets, lack of schooling, or withholding of adequate nourishment in the case of the bright child or by complete emotional security, excellent schooling, and adequate nutrition in the case of the dull child. A starving genius would, by this definition, be just as superior to a well-fed moron as a well-fed genius would be superior to a starving moron. Also, as a corollary, one must assume that an adequate measure of intelligence will yield a statement of intellectual status that does not change throughout life. Unfortunately for those who hold this view, the accumulated evidence of four or five decades does not give the proper support. When a child at age 8 gets an IQ of 119 and, after a prolonged session in a sanitarium for tuberculosis, has an IQ of 94, it becomes doubtful if intelligence is something that is fixed and immutable. Similarly, this definition does not agree with the findings that adopted children sometimes come nearer in their IQ to their adopted than to their natural parents, especially when the former are very intelligent and the latter rather inferior in mental capacity. Relatively few people at the present time believe this statement to be true, in its extreme form, at least.

Perhaps the commonest assumption at present is expressed in the second statement above—that is, that intelligence is a separate entity—presumably inherited—but that its growth can be either retarded or accelerated.

¹E. Fromm and L. D. Hartman, *Intelligence: A Dynamic Approach*, Doubleday & Company, 1955, p. 2.

by environmental factors. Thus, inadequate nourishment, disease, inadequate stimulation, or preoccupation with emotional problems dulls it, whereas good health, a wide variety of stimulation, and good personal adjustment allow it to increase to whatever level is permitted by the original inheritance. This point of view is supported by facts and gives one possible explanation of them. It explains why Johnny, who had an IQ of 105 before his parents were divorced and before he became a sort of emotional football between them, now has an IQ of only 88. It explains also the differences brought about by environment. For instance, the level of intelligence among Negroes in one southern city correlated highly with the length of time they had been city dwellers.² This sort of situation makes no sense, unless intelligence is influenced by the degree of stimulation found in the environment, if it were fixed at birth—or before birth—it would not make any difference whether these children lived on an isolated farm and received essentially no schooling, or lived in a city, where there are more things stimulating to the intellect, more people to furnish ideas, and better schools.

In the last decade, as the result of intensive research into factors affecting the intellectual development of the same children over a period of years, many educators have come to feel that intelligence is just one phase of an entire individuality and is intimately bound up with all other phases. In short, there is nothing fixed about it. It goes up and down with circumstances. A bright child can become actually duller and a dull child actually brighter, depending upon what happens to other phases of the complete personality. In this case “personality” means the entire complex of traits that make up the individual—not merely his nonintellectual traits, as the word frequently means. By this theory, each individual inherits a complex of completely interdependent traits, and any change in one is automatically accompanied by changes in the others. This may be the view that all psychologists will eventually hold regarding the nature of intelligence.

Obviously, in judging the efficacy of a test of intelligence it makes a difference to which of these fundamental viewpoints one subscribes. It also affects the nature of the tests themselves. In the first case, one tries to include in a test only measures of something inborn and to exclude any items that depend upon schooling or environmental conditions. In the third case, one tries to measure a person's total adjustment to life. The resulting tests would be quite different in character. Thus far, most tests are of the former type, at least in theory.

It might as well be admitted at once that, unless a test is given orally, it is dependent in some measure upon schoolwork, because the pupil has at least to read the test, and he may have to read the directions as well. However, since the results of group tests are likely to be used for purposes

² O. Klineberg, *Negro Intelligence and Selective Migration*. Columbia University Press, 1935, 66 pp.

of classifying pupils into grade levels, the inclusion of simple bits of school-learned material raises no great difficulties, although they prevent a test from measuring "pure" intelligence—provided this could ever be done. For instance, one might present a child with such series of numbers as those shown below and ask him to write the next number in the series on the line

9	8	7	6	5	_____
12	14	16	18	20	_____
1	3	2	4	5	_____

at the end. So far as puzzling out the sequence is concerned, one might be measuring "pure" intelligence, but the pupil has presumably been taught to count in school, so one is automatically measuring a small learned skill at the same time. Or, if one uses a test of analogies, such as those shown below, the pupil has, first, to read the words

black—white	bad—(funny	quick	wrong	good	full)
up—above	down—(beyond	below	between	across	together)

even though he has to think out the relationships—seeing that "black-white" is an opposite, while "up—above" is a similarity, the test is to some extent dependent upon schoolwork. The usual form of such a test is to list answers and let the pupil select the one he thinks best, since in this way the need for handwriting and spelling is avoided, but he must read just that much more. So it is best to admit at once that a test constructor can rarely follow Binet's original principle to select items that a child has had a chance to learn but that no one has taught him.

The testing of adolescent or adult intelligence is even more difficult than the testing of childish abilities, because with increasing experience the members of an age group become more and more differentiated, and the constructor of tests finds it harder and harder to find material for test items that will be hard enough to test the higher age groups but will not be so specialized that some portions of the population will be utterly unfamiliar with the concepts. In the last two decades several investigators³ have tried to develop tests that are appropriate for adolescents and adults but no one has been wholly successful to date. In most earlier studies, in which tests developed on children were used, adults showed a steady loss of intellectual power after the age of about twenty. No thoughtful person really believed that such losses begin until a much later age, and the tests constructed more recently seem to indicate that there is a plateau of some length during the years of maturity before any decrease appears. As tests that are more and more appropriate to the measurement of mature intelligence are con-

³ D. Wechsler, *The Measurement of Adult Intelligence*, Williams & Wilkins Company, 3d ed., 1955, 110 pp.; L. M. Terman and M. A. Merrill, *Measuring Intelligence*, Houghton Mifflin Company, 1937, 481 pp.

structed, it may be that native ability will be shown to grow steadily up until senescence.

Mental tests may be either verbal or nonverbal, and they may be given to one pupil at a time or to several pupils at once. For reliable individual scores it is necessary to test pupils one by one, but measurement of whole classes is possible by means of group tests. Most tests for use with adolescents are verbal—that is, they require the understanding of language, oral or written.

Types of Test The most widely used individual test is the Binet, first published by Binet in 1910, revised for use with American children in 1912, again revised and extended by Terman (known as the Stanford Revision of the Binet Scale) and once more revised, with additional tests to be used in the repeated examination of the same children, as the Terman-Merrill Revision. This famous test is always given individually. It runs from age 2 to “superior adult.” The method of scoring consists in first finding the year at which a child can pass all the tests, this year is then used as a base. The examiner next gives the tests for the following two or three years, until he feels certain that the child has reached his limit. The values for the tests passed above the base are then added, in the fashion illustrated below.

<i>Basal Age—7</i>	<i>No. of Tests Passed</i>	<i>Months' Credit per Test</i>	<i>Total Credit</i>
Age 8	5	2	10 months
Age 9	3	2	6 months
Age 10	0		0
			<hr/> 16 months

Mental Age is 7 years plus 16 months, or 8 years, 4 months

Since 1916 there has been development of the group tests of intelligence. The motive for this trend was largely practical. The Binet Examination takes at least forty minutes to give and may take well over an hour. Only one child can be tested at once. The time needed for testing all the children in the first grade of a school was prohibitive, and any subsequent testing, to check on the accuracy of the first IQ or to study growth, was out of the question. The group test of intelligence seemed the answer to these purely practical difficulties, but it has certain drawbacks along with its undoubted advantages.

In the first place, it has to be “objective”, that is, the pupil must record his answers in such a way that his paper can be scored by anyone, even a clerk. Unless scorers make clerical errors, all of them will get the same score for the same paper. The objectivity is necessary for a further reason. In giving the Binet, the tester can clear up doubtful or irrelevant answers

by further questioning, but with a whole class such a procedure is impossible. So the answer to each question has to be either right or wrong. Moreover, the objective form eliminates not only excess scoring time but also minimizes the effects of schooling. It is true that the pupil has to read the test, at least beyond the third grade, but he does not have to write, to compose, or to spell. If these educational skills were added, the results would be even less a reflection of ability than they are when only reading is involved.

Group tests have been used so widely that the present generation of college students knows from experience what they are like. It seems unnecessary, therefore, to do more than to list the commonest types of item, with a single example of each, for such tests as are likely to be used with adolescents.

- 1 Classification jump run hop sit walk
- 2 Best Answer Why should one not leave only rags and wastepaper lying on the floor of an attic or a cellar?
 - a) there isn't enough room for other things
 - b) visitors will know the householder is lazy
 - c) the mess looks unattractive
 - d) they may set themselves on fire
- 3 Synonyms BEAUTIFUL—thankful lovely Christian tiresome
comfortable
- 4 Information Which one was a famous mathematician?
Washington Hawthorne Einstein Dewey Roosevelt
- 5 Analogies Hat is to head as glove is to foot face back leg hand
- 6 Number Progressions 12 6 14 7 16 _____ (18 $7\frac{1}{2}$ 9 8 10)
- 7 Opposites. FANCIFUL—lenient prominent practical democratic
thoughtful
- 8 General Vocabulary ICONOCLAST—a) one who is a leader b) one who philosophizes
c) one who breaks images d) one who takes part in a revolution

In the first type the pupil is to find the word that does not "belong" with the others and underline it, in the second, to mark the best answer, in the third, to find the word with the meaning closest to the one in capitals, in the fourth, to mark the correct answer, in the fifth, to complete the sentence, in the sixth, to select the number that fits the pattern already established, in the seventh, to mark the word that is most nearly opposite in meaning from the one in capitals, in the eighth, to find the best definition.

Sometimes one needs to test either children who are too young to read or adults who are illiterate, or either children or adults who are foreigners. In such cases, one has to rely upon nonverbal tests, with as few directions as possible, since these have to be translated for foreigners—and one never knows what the interpreter may add or explain, and the longer the direc-

tions, the better chance the interpreter has to improvise. Such tests may be either individual or group. They include sundry kinds of puzzles. Many of them require the same kind of thinking that is called for by verbal tests, but the items consist of symbols instead of words. One brief series of items appears in Figure 57. It will be noted that these analogies merely substitute geometric for verbal symbols.

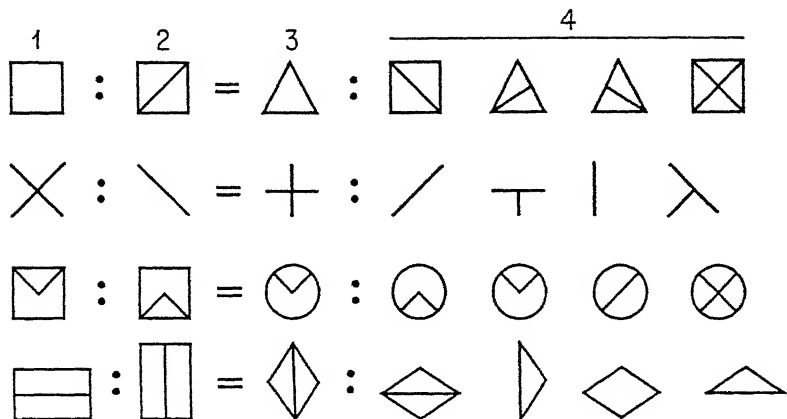


Fig. 57 A Nonverbal Test of Analogies

Method of Expressing Test Scores The Binet Scale introduced the idea of mental age. To this concept was later added the IQ, which will be explained shortly. A few tests give their scores in terms of percentiles. Four other terms sometimes appear and should be explained: the average, the median, the probable error, and the standard deviation. The first two are measures that tell where the center of a series of scores may be, the second two indicate the range over which the scores are scattered.

The average is familiar and is easily found. If 41 children have taken a test, one simply adds their scores together and divides by 41. To find the median, one arranges the papers in order from high to low, and counts into the middle, the score on the twenty-first paper is the median—which means merely the middle score in a series.

The probable error is given as follows for a sample score of 36 points and an error of 8: 36 ± 8 . This probable error means that half of the scores on a second giving of the test will fall between $36 + 8$ and $36 - 8$ —that is, between 28 and 44. The other half will vary still more. The probable error is primarily a measure of reliability. The smaller it is, the better, but above all it needs to be small in relation to the amount of the score, thus, a score of 246 ± 10 is a reasonably reliable result, whereas a

score of 16 ± 10 would be very unreliable, since the variation from 6 to 26 probably covers almost the total possible distribution of a test for which the average would be 16. A repeated testing might therefore put the child with a first score of 16 near the bottom or near the top. A variation of 10 points from 236 to 256 would probably have little meaning.

Sometimes test results are expressed in terms of standard deviation, of standard score, especially when results from several tests are to be compared. To obtain these scores, one merely divides the total distribution into equal parts above and below the average, these divisions are expressed as +1, +2, +3, etc. and -1, -2, -3, etc., usually with decimal fractions added to give such a result as -1.6 as the standing of a pupil. That is, he scored 1.6 standard scores below the middle. The standard deviation is thus a measure of the distance of a given individual from the average of his group. These scores are used, for instance, in Figure 59 on page 148.

To return to the IQ, which is an abbreviation for intelligence quotient—the mental age, abbreviated usually to MA, is determined by what tests a child passes—as explained above—or, in the case of a group test, by what score he makes. The IQ is the ratio between a child's chronological age and his mental age. If his mental capacity is exactly what it should be for his age, his IQ is 100, if he is more advanced mentally than others of his age, it is more than 100, if he is developing more slowly than others in his age group, it is less than 100. Thus, a child with a chronological age (abbreviated to CA) of 5 and an MA of 10 would have an IQ of 200, that is, he has twice as much ability as shown by other five-year-olds. A child with a CA of 10 and an MA of 5 would have an IQ of 50, that is, his mental growth is only half the expected amount for his age. To get the IQ one simply divides the MA—reduced to months—by the CA—similarly reduced—as shown below.

CA—10 years 11 months = 131 months

MA—13 years 4 months = 160 months

$$\begin{array}{r}
 131) 160 \quad (1.22 = \text{IQ} \\
 \underline{131} \\
 290 \\
 \underline{262} \\
 280
 \end{array}$$

This child has 22 per cent more mental ability than one expects from a child of his age. In actual practice the IQ is multiplied by 100 to get rid of the decimal point. The 1.22 above would therefore be read as 122.

The total range of recorded IQ's is from about 20 to 200. These arrange themselves in a normal curve, as shown in Figure 58. Below the figure is given the classification of IQ's. These range from idiot to genius.

It should be noted that 79.5 per cent lie in the low normal, normal, and high normal groups.

In theory, a person's IQ remains absolutely constant throughout life, but actually it does not. Either there are real changes in the growth rate from time to time, perhaps because of variations in physical or emotional condition, or the variations from one test or one tester to another produce rather large differences. In any case, retests after a period of years show IQ's somewhat above or below the original ones, and a sufficient number of retests will produce quite a range of IQ's for the same child. Dull children vary least, brilliant children next, and those of average ability most. An

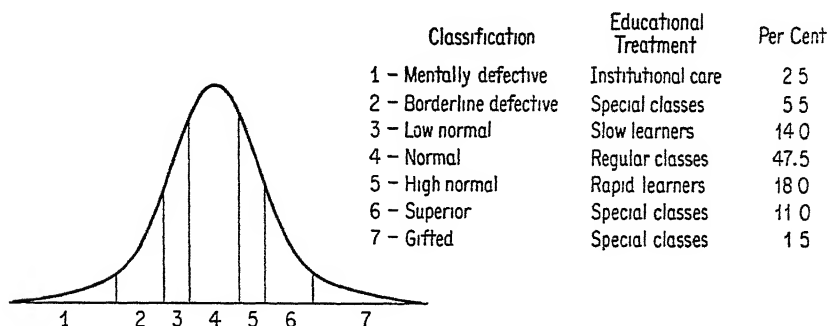


Fig 58 A Normal Curve

excellent report covering retests of over seventeen hundred children of superior ability, first tested at the age of six and retested some years later, gives a probable error of between 12.3 and 18.5 for the eighteen different groups included in the study.⁴ These figures mean that on the retest two thirds of the children showed a variation, plus or minus, of 12 to 18 points in IQ, while the other third showed a variation of more than these amounts.

An investigation by means of group tests of intelligence gives the following information about the variability of IQ's in high school.⁵ The average IQ of 114 pupils rose from 104 in the freshman year to 106 in the senior year. For 7 per cent the IQ remained unchanged, for 22 per cent it increased 5 points or less, for 33 per cent it increased more than 5 points, for 22 per cent it decreased 5 points or less, and for 16 per cent it decreased more than 5 points.

It is interesting and enlightening to trace the variations of mental

⁴F. L. Goodenough, "Studies of the 1937 Revision of the Stanford-Binet Scale I. Variability of the IQ at Successive Age Levels," *Journal of Educational Psychology*, 33:241-251, 1942.

⁵S. J. Knesevich, "The Constancy of the IQ of the Secondary School Pupil," *Journal of Educational Research*, 39:505-516, 1946.

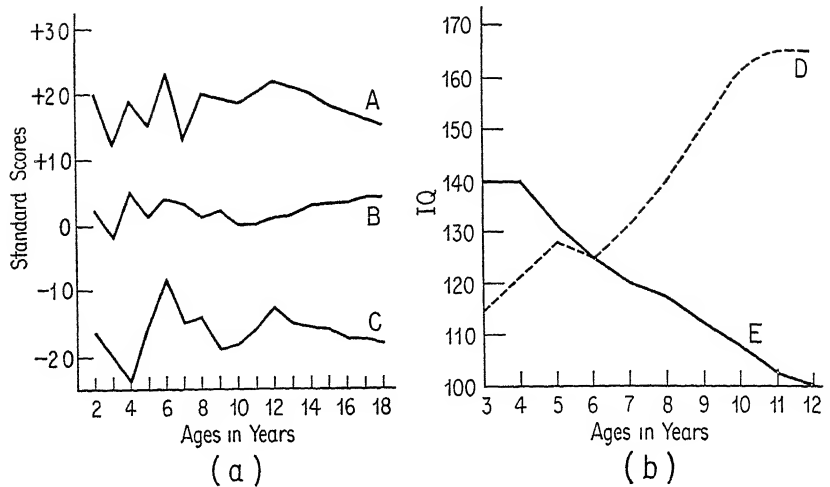


Fig 59. *IQ Variations in the Same Individuals (1)*

(a) Based on M P Honzik, J W MacFarlane, and L Allen, "The Stability of Mental Test Performance between Two and Eighteen Years," *Journal of Experimental Education*, 17 317-318, 1948. Used by permission of the Journal.

(b) Based on L W Sontag, C T Baker, and V Nelson, "Personality as a Determinant of Performance," *American Journal of Orthopsychiatry*, 25 555-562, 1955.

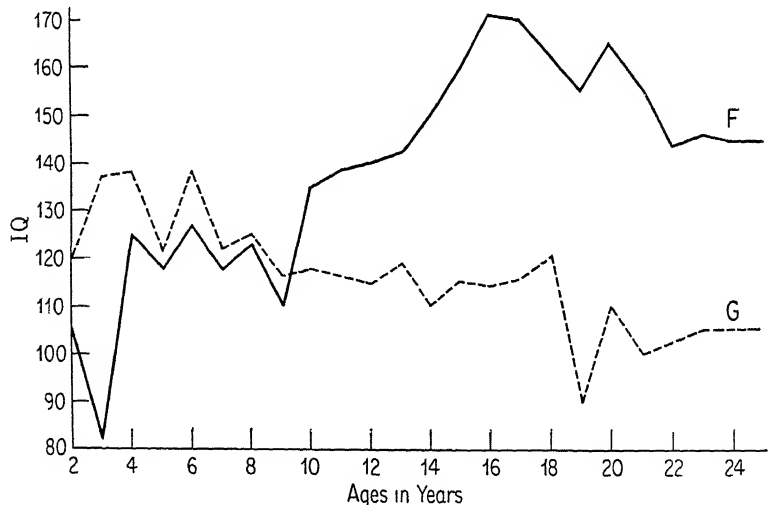


Fig 60 *IQ Variations in the Same Individuals (2)*

Based on N Bayley, "Individual Patterns of Development," *Child Development*, 27 45-74, 1956.

development in individual cases. In order to make the charts easier to read, the results have been presented in three small figures (Figures 59-60). Children A, B, and C, who were tested yearly from age 2 to age 18, all show relatively little variation in the IQ results. Any one test would have classified these children as gifted, average, and dull. Child D shows a gain in IQ from 115 to 165 between the ages of three and twelve. Child E, during the same years, decreased in IQ from 140 to 100. Child F's first seven tests average at 113 and the last seven at 152, Child G's similar averages were 130 and 102. These last four children show both great variation from year to year and a marked trend in one direction or the other.

Further light is thrown upon the causes of variability in the IQ by following the case history of a single child and relating the IQ variations to nonintellectual factors in his life. The boy whose record appears in Figure 61 varied from 106 at a year and a half, to 123 at six years, to 163 at ten, to 122 at eighteen. This lad seems to have had a manic-depressive type of personality and was sometimes abnormally listless and shy, sometimes highly overactive. The examiners who gave him the tests at the earliest years reported that the scores were too low because the boy had no interest in the test and was unwilling to exert himself. He was also at times in poor physical condition. At age 4 he made a conspicuously high score. At age 6, he had been in bed twelve weeks with episodic asthma (of possibly psychosomatic origin), his father was in a sanatorium with tuberculosis, and his mother had a full-time job. His highest IQ coincided with the return of his father to normal life, the recovery of his mother from an operation, and his own first reasonably healthy years and first favorable reports from school. The examiners who gave the tests at ages 9 and 14 reported that the boy could not be stimulated into really trying. The last score, at age 18, was preceded by a period of great excitement, overactivity, emotional preoccupation, and compulsive stealing. The personal disorganization shows in the lower IQ level. This boy's personality is of a type that interferes considerably with his mental functioning. Moreover, his home situation and pressures often combined to operate upon the already unstable child and depress his scores. Apparently, the date of the yearly test coincided just twice with an optimum personal and social situation.

Scores from tests may also be expressed in terms of percentiles. In fact, scores from such tests as are used at entrance to college usually are so expressed. The total distribution is divided into 100 equal parts, each of which is a percentile. The 50th percentile is exactly in the middle, it is also called the median. If a student is said to score at the 10th percentile, this statement means that 90 per cent of the students scored above him and 10 per cent below him, that is, his score is probably too low for successful college work. If he scores at the 88th percentile, 12 per cent of his class scored above him and 88 per cent below that is, he made a definitely

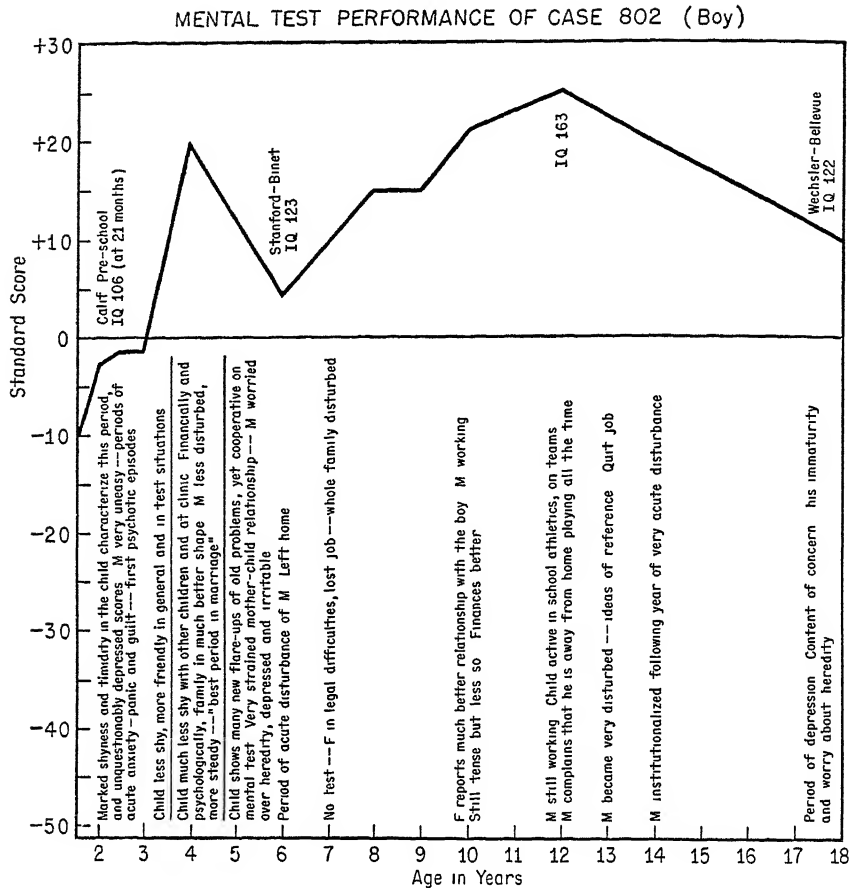


Fig 61 *Variations in IQ as Related to Background Factors*

Honzik, MacFarlane, and Allen, *loc cit*, p 320. Used by permission of the *Journal of Experimental Education*

superior score. Figure 62 shows a hypothetical distribution of percentiles, with the 1st, 10th, 25th, 50th, 75th, 90th, and 100th percentiles marked. The percentile form of expression indicates the position of any one person taking a test in relation to all the others who have taken it. It is neither a score nor a mental age.

Influence of Environment It is not difficult to demonstrate that test scores are influenced by the culture in which the individuals tested have lived and the experiences they have had up until the time of the testing. Thus, an investigator of Polynesian children reports complete uselessness of the test in the Binet Scale that requires children to choose the prettier of two faces, one of which is very ugly. The Polynesian children refused point-

blank to make any selection until they were told the social caste of each pictured individual, and then they unerringly chose the one belonging to the higher caste. It made no difference whether the higher ranking were assigned to the prettier or the uglier of the two faces. If the children were told that both faces were of people from the same caste, both were adjudged equal in pulchritude. Since prettiness in the abstract is unknown in this culture, a test based on Anglo-Saxon concepts was completely useless. Those who have done research with Indians are unanimous in testifying that an intelligence test with a strict time limit cannot properly be used with Indian subjects. Native life puts no premium whatever upon time, indeed,

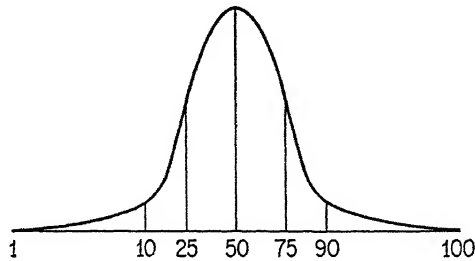


Fig. 62. A Percentile Distribution

one rarely succeeds in hurrying Indians for any reason and certainly not for purposes of making a good score on a test. However, if they are allowed to complete a test at their own rate, Indian adolescents make scores closely approximating those of white children of the same age. Indian children score as inferior to whites on a test that requires them to "draw a man," but as superior to them if the test directions are changed to "draw a horse."⁶ Country children usually score below real capacity on tests of intelligence. They, too, are in no particular hurry. Moreover, many items of the average intelligence test are based on experiences one has in a city but does not have in the country. Thus the answer to the question on the Binet Scale, "What would you do if you were going some place and missed your train?" depends upon whether the trains run once an hour or twice a week. Country children also do poorly on the Binet test about finding a ball in a round field, probably because they are not willing to accept the idea that a field *could* be round. They want to know how it could be plowed, how it could be fenced, and so on, it is often almost impossible to bring their attention to the problem of finding a ball in a field that to them seems an impossible phenomenon. Norms for widely used intelligence tests are based

⁶ P. H. Du Bois, "A Test Standardized on Pueblo Indian Children," *Psychological Bulletin*, 36 523, 1939.

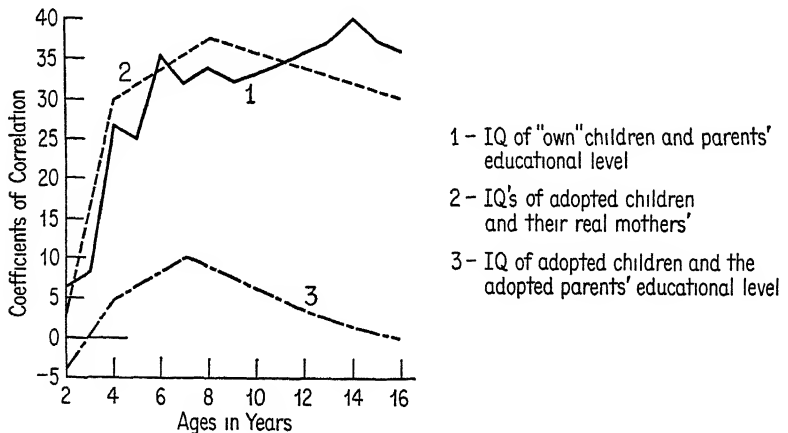
almost exclusively on urban children. These tests automatically handicap pupils from any other type of background. Moreover, the city child sees more tests than rural or foreign children do, he develops a sophistication about them and does not waste time in examining them as novelties.

There are two contradictory types of evidence concerning the effect that adoption into a superior home has upon the intelligence of children whose mothers, at least, were of inferior ability. Two contrasting studies have been selected for presentation. In one case 129 adopted children were first classified into three groups: those whose mothers had an IQ of 70 or less (87 cases), those whose fathers were casual laborers or unemployed (11 cases), and those who belonged in both these classifications (31 cases). The IQ's of the children, adopted at the age of about six months and tested at five years of age, were found to be as presented in Table 3. These children had IQ's far above what one would expect, in view of their heredity.

Table 3 CHANGES IN IQ

Group	<i>IQ</i> Average	Above 120	Below 80
A	105.5	15	4
B	110.3	28	2
C	104.1	—	—

From H. M. Skeels and I. Harms, "Children with Inferior Social History: Their Mental Development in Adoptive Homes," *Journal of Genetic Psychology*, 72: 283-294, 1948.

Fig. 63 *Heredity versus Environment*

Based on M. P. Honzik, "Developmental Studies of Parent-Child Resemblance in Intelligence," *Child Development*, 28: 215-228, 1957.

A more recent study, however, contradicts these findings. As shown in Figure 63, which gives the correlation—for children of different ages at

the time of the testing—between (1) the IQ of “own” children and the educational level of their parents, (2) the IQ of adopted children and that of their natural mothers, and (3) the IQ of adopted children and the educational level of their adopted parents. In both the two former cases, the children became more and more like their natural parents as they grew older. The relation with the adopted parents was at all times not far from zero.

It has long been the conviction of psychologists that one had only such intelligence as one inherited and that all environment could do was to provide or withhold stimulation. That is, the heredity factor far outweighed the environmental. Perhaps, however, this view needs to be modified. It is possible that during the earliest years of life a superior environment might add a few cubits to a child's inherited mental stature. But the point is far from proved, and the weight of evidence is still in favor of the predominant importance of heredity in determining the limits of intelligence, although no one denies that environment may operate to prevent a child from reaching as high a level as he could.

Growth in Intelligence

General Intelligence As in the case of physical growth, it is best to measure intelligence by means of longitudinal studies, that is, by repeated measurements of the same children. One recent study reports the growth of boys and girls from birth until age 21. The curve for both sexes combined is presented in Figure 64. It will be noted that growth was rapid

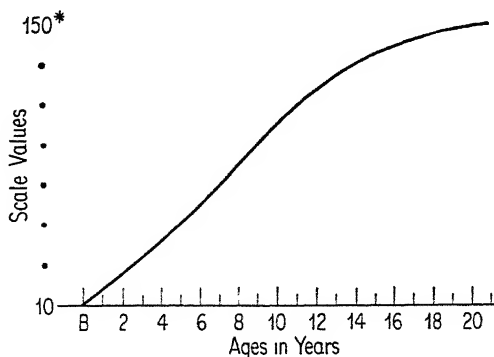


Fig. 64 *Growth Curve in General Intelligence*

Based on Baxley, *loc. cit.*, p. 66

* The scale values are purely arbitrary units of uniform size. It is the shape of the curve that is important.

up until about age 12, after which the rate—at least as measured by the tests used—decreases a little. Mental growth is still going on at the last

age reported, indeed, there is little indication that it is even slowing down.

There is abundant evidence that mental growth is still fairly rapid during the years of high school and college—at least among those adolescents who continue into collegiate work.⁷ In one case, groups of pupils from fourteen through nineteen were tested and then retested a year later. The percentage gain of the second over the first score was, for ages 14, 15, 16, and 17, an average of 42 per cent, 39 per cent, 35 per cent, and 32 per cent, respectively.⁸ Even those who were 19 at the time of the first testing added 24 per cent to their score. Some of the gain was probably due to familiarity with the test, although an alternate form was used, but even after one allows for this factor, there is still a considerable increase during the period.

The superiority of college seniors over college freshmen has also been reported. In one case 26 students who were tested yearly increased from an average of 105 points as freshmen to 270 as seniors.⁹ In another, the gain was from 48 to 79 points.¹⁰ These studies show that mental growth is still going on during adolescence, and at a fair rate.

From the early days of testing there has been argument as to the point at which mental growth stopped and that at which deterioration set in. It was at first supposed that a person had developed by the age of eighteen all the mental power that he was ever going to have, and that from then on any apparent increase was due merely to experience in using what ability he had. Recent research has cast doubt upon this assumption. It now seems probable that growth continues up to nearly thirty. From then on for an undetermined number of years there seems to be a plateau, with loss occurring at some time after fifty, or perhaps even later. A curve from twenty-five years ago, a recent curve, and one of the writers' own guess as to the ultimate shape of the growth curve, are presented in Figure 65. Such loss as takes place in the later decades of life is by no means uniform, as is shown in Figure 66. The scores on the verbal tests either remained essentially the same or improved from adolescence on, but the performance tests showed a decline. This result may be due in large measure to decrease in manual dexterity with age and is not a true reflection of intellectual decline. One investigator gave the Army Alpha Examination to 127 men who had first taken it as soldiers thirty years earlier, there was a slight increase in total score, and on no test was there any decrease. Thus, it begins to look

⁷ R. L. Thorndike, "Growth of Intelligence during Adolescence," *Journal of Genetic Psychology*, 72: 17-27, 1948.

⁸ F. N. Freeman, "Intellectual Growth of Children," *Psychological Monographs*, 47: 20-34, 1936.

⁹ A. M. Shuey, "Improvement in the Scores of the American Council on Education Psychological Examination from Freshman to Senior Year," *Journal of Educational Psychology*, 39: 417-426, 1948.

¹⁰ W. A. Owens, "Age and Mental Ability: A Longitudinal Study," *Genetic Psychology Monographs*, 48: 3-54, 1953.

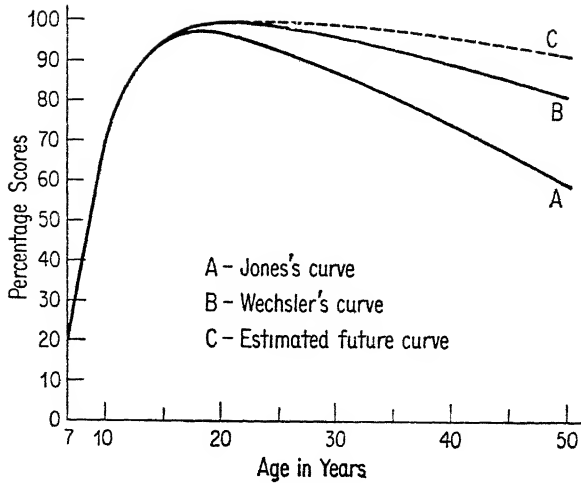


Fig 65 Adult Intelligence

(A) Based on H. E. Jones and H. S. Conrad, "The Growth and Decline of Intelligence," *Genetic Psychology Monographs* (No. 3), 13: 223-298, 1933.

(B) Based on D. Wechsler, *The Measurement of Adult Intelligence*, Williams & Wilkins Co., 1944, p. 118.

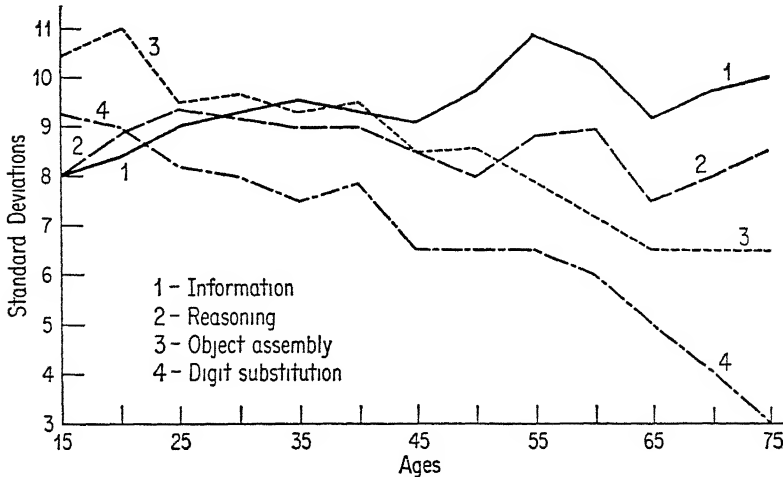


Fig 66 Changes with Age on Different Types of Test

Based on R. J. M. Corsini and K. K. Fasser, "Intelligence and Aging," *Journal of General Psychology*, 83: 257, 1953.

as if the decades of adulthood did not show any such losses as were at first supposed to occur

Children develop intellectually at a rate that is directly proportional to their initial capacity. This growth, which seems hardly fair, is one more instance of "to him that hath shall be given." Figure 67 shows the mental

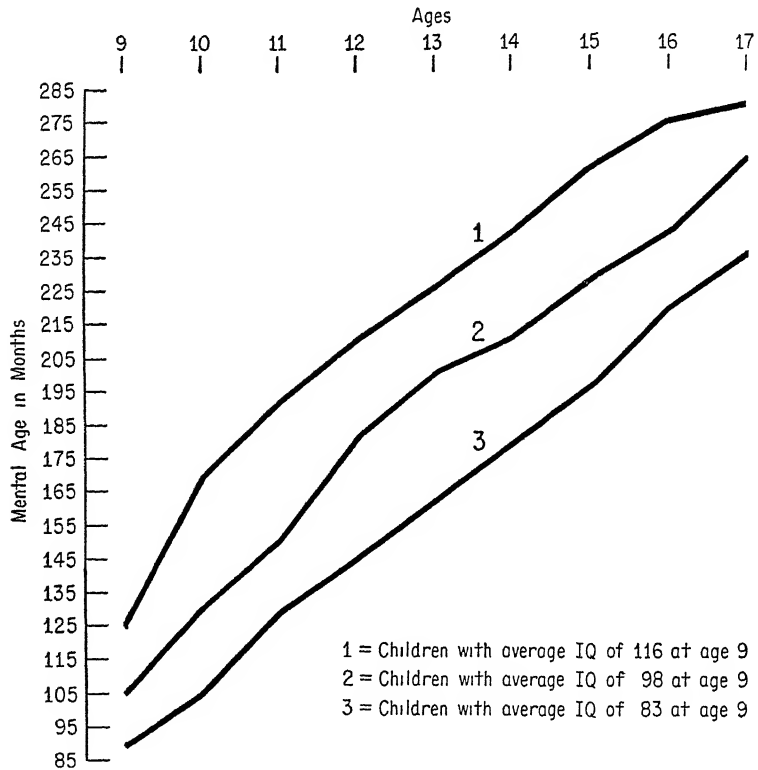


Fig 67 Mental Growth Curves for Three Groups of Children

From F. N. Freeman, "Intellectual Growth of Children as Indicated by Repeated Tests," *Psychological Monographs*, XLVII, Whole No. 212 (1936), p. 29. Used by permission of the publisher.

progress of three groups of children who had different degrees of intellectual ability to start with. It should be noted that each group retains its relative position from one age to another.

In mental as in physical growth there are wide variations among individuals. Figure 68 shows curves of growth for four boys and four girls. Boy A grew rapidly and remained at all ages superior to any of the others. Boy B represents an average development. Boys C and D both grew slowly, but the former picked up a little speed in his adolescent years, whereas the

latter did not. Girls A and B are both superior, but the development of Girl A is rather irregular, there are three regressions in her curve. Girl C is in the average group, but she also shows regressions. Girl D grew slowly but quite regularly. The growth of individual children always shows these variations. It should be noted that the difference between the brightest and the dullest boy or girl becomes greater with age.

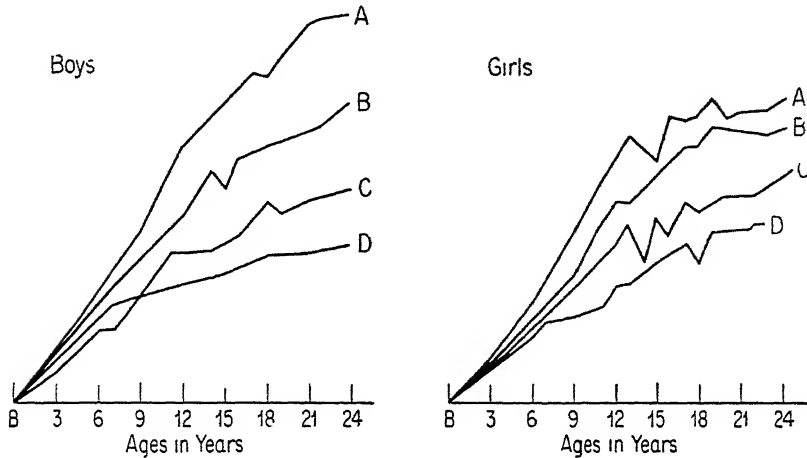


Fig 68 *Individual Growth Curves in Intelligence*

Based on Bayley, *loc cit*, p 67

Relation of Intelligence to Social Level and Occupation: There have been a great many studies concerning the relationship of intelligence to social and economic variations. It seems sufficient to present two that are typical. The first gives results from the testing of draftees in World War II. It will be seen at once that the three highest groups in Figure 69 are composed of men who deal with words and mathematical symbols as part of their regular business. Either they were verbal types to begin with and therefore chose a kind of work in which their specific abilities would make them successful, or else their work had given them unusual experience in dealing with verbal symbols, or very likely both. The test was, of course, verbal, it therefore gave these men a chance to make high scores. The groups at the bottom of the distribution are those who work with their hands. Their regular work does not therefore give them constant experience in the manipulation of verbal symbols. It is difficult to tell whether the results reflect anything more than differences in the reinforcement of native abilities by one's customary activities. One has also to consider that the

tests are of a type developed on urban residents. Those from other environments might be expected to make scores below their real ability.

Investigations in the relationship of intelligence to social status are also open to a certain amount of criticism because those adults from the "upper" classes of society usually become members of that class through having more than average intelligence to start with. Conversely, adults from the "lower" classes may be there because they do not have enough ability to rise higher. In the United States classes are sufficiently mobile that they are to a considerable measure reflections of basic abilities, this would not be so in a society in which class standing was inherited. There are, of course, certain families

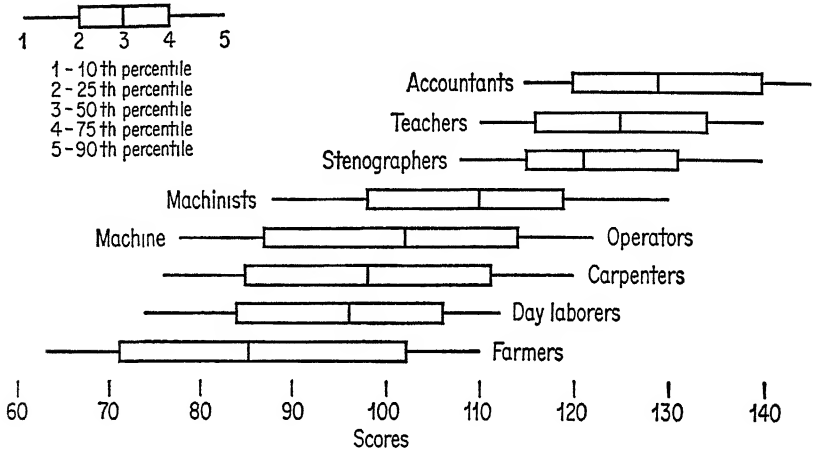


Fig. 69 *Relation of Intelligence Test Scores to Employment*

Based on N. Stewart, "AGCT Scores of Army Personnel Groups by Occupation," *Occupations*, 26: 5-41, 1947.

in any community who receive a high ranking on the basis of inherited wealth, but these are in the minority. The particular study selected for presentation concerns the relationship of scores made on two tests by fourteen-year-old boys from families that were rated as having social status at all levels from high to low. The results appear in Figure 70. For the reasoning test, the relationship is very consistent. The higher the class of the family from which the boys came, the higher score they made. The relationship of the spatial test is not quite as close and is somewhat variable. This second test measures a particular type of ability that may occur in anyone, but even in this case the general relationship is clear. There is, however, the "source of error" referred to above: that intelligence is one of the determiners of social class. If the boys from the higher groups may be assumed to resemble their parents, they presumably have a superior inheritance.

Factors of Intelligence. It has been evident for some years that "intelligence" is of more than one kind or that it has a number of factors, each of which may vary independently. The disagreements that have arisen are not over the fundamental idea of factors but over the question of what they are and how many there are of them. The methods of determination are intelligible only to the expert, hence they will not be described here. One analysis finds the primary abilities to be comprehension of numbers, verbal

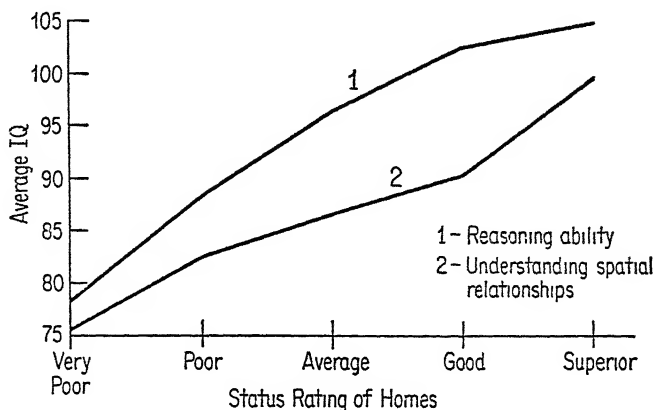


Fig 70 *Relation of Intelligence to Social Class*

Based on K. W. Eels, *Intelligence and Cultural Differences*, The University of Chicago Press, 1951, p. 148

comprehension, perception of space, inductive reasoning, and memory.¹¹ Another investigator lists accounting aptitude, tonal memory, creative imagination, abstract visualization, inductive reasoning, number memory, manual dexterity, memory for design, vocabulary, and reading ability.¹² A third report includes abstract and concrete reasoning, verbal ability, and spatial concepts.¹³ A fourth presents eight factors: verbal reasoning, mathematical ability, abstract reasoning, spatial relationships, reasoning about mechanical problems, clerical skills, and linguistic ability with both words and sentences.¹⁴ A fifth analysis yielded eight variables: verbal ability, mechanical aptitude, abstract thinking, spatial understanding, numerical ability, clerical skill, spelling ability, and understanding of sentences. A sample set of returns with this last test is shown in Figure 71.

¹¹ L. L. Thurstone, "Primary Abilities," *Occupations*, 27: 527-529, 1949.

¹² J. O'Connor, *The Unique Individual*, Human Engineering Laboratory, Boston, 1948, 249 pp.

¹³ J. J. Dempster, "An Investigation into the Use of Estimated Factor Scores in Describing and Comparing Groups of Secondary and Senior School Boys, of Eleven Plus," unpublished master's thesis, University of London, 1944.

¹⁴ J. E. Doppelt, "The Organization of Abilities in the Age Range from Thirteen to Seventeen," *Teachers College Contributions to Education*, no. 962, 1950, 86 pp.

These results show that the individual tested had a high degree of verbal intelligence, of feeling for sentence structure, and of ability to think in abstract terms, numerical, mechanical, and clerical abilities are also good, but not as high as the first. The real defects of this person lie in the field of space perception—a defect that accounts also for the low score in spelling, since possibly he does not recall what words look like. Such an outline sug-

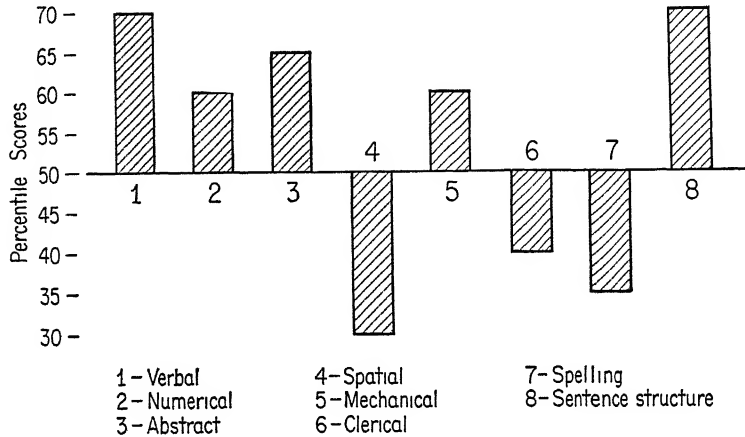


Fig. 71 *Measurement of Special Abilities*

Based on G. K. Bennett, H. G. Seashore, and A. G. Wesman, *Differential-Aptitude Tests*, Manual, second edition. Psychological Corporation, 1952.

gests that this individual could be a writer or a philosopher or possibly a mathematician, but he would be of little use in an office, nor would he be an especially good mechanic—although he might understand the principles well enough. In general, girls and women tend to be superior in any manipulation of language and in clerical skills, while men and boys make higher scores in abstract thinking, in space perception, and in mechanical ability.

Summary

Throughout the modern school system tests of intelligence are in frequent use. A teacher therefore needs to develop an understanding of them so that she can know what they will and what they will not do, and can give meanings to the customary scores. A pupil's intellectual level is an important factor in conditioning his schoolwork, although it is by no means the only factor.

A single measure of intelligence is only an approximation at best. It may be a child's best performance, his worst, or anything in between. It

is not until one has enough repeated measures to establish a *pattern of growth* that one is safe in making predictions

During the high school years there is a marked growth in mental power. A teacher should therefore change the nature of her assignments as the pupils mature. The power is there, waiting only for the right stimulus.

In the past the school has emphasized intellectual progress to the detriment of social and emotional development. The modern school has sometimes swung rather too far in the opposite direction and has tended to neglect intellectual development in order to concentrate more heavily upon social and emotional adjustment. In such schools the classroom has become ancillary to the playing field and to the committee room. Educating the "whole" adolescent includes giving his newly developed mental powers something to grow on. A teacher can do much through her daily assignments and her classwork to stimulate eager interest and to promote intellectual growth.

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9

Special Intellectual Abilities

The present chapter will deal with such special facets of intelligence as are usually referred to as memory, imagination, suggestibility, humor, and reasoning. In earlier days the popular misconception was of a "mind" divided off into areas, each with an underlying area in the brain. These mental "functions" were assumed to operate independently and to be educatable, one by one. Although this time-honored view has been abandoned in the light of modern research, such mental facets as imagination and reasoning still remain. These capacities are not, however, separate "functions." What differentiates reasoning from memory, for example, is the purpose toward which the integrated effort of the *entire intelligence* is directed. Presumably all these abilities involve use of one's total capacity, rather than any isolated portion of it. But the end in view varies from one "function" to another, as does a person's relative proficiency. It is thus possible, in spite of certain destructive criticism, to employ these terms with this somewhat changed meaning. The presentation is inevitably somewhat uneven because the amount of work done in different areas is uneven. Some of it is admittedly old, but it is still of value in shedding light upon adolescent growth, and it has not yet been replaced by more modern investigations.

Memory

According to popular misconception, children have better memories than have adolescents or adults. What is true is that they are much more willing to memorize, most adults do not like monotony and therefore prefer logical to rote learning. The typical adolescent distaste for memorizing is even more intense. Although children do not resent memorizing, they are not especially efficient at it. They tend to substitute memorizing for reasoning, probably because they get more rewards from adults for a well-memorized answer than they do for one based upon childish and often fallacious reasoning.

The Binet Examination gives evidence of growth in memory. A child

of two and a half can repeat two digits after hearing them read aloud once, at three, he can repeat three digits, at four and a half, four digits, at seven years, five, at ten years, six. A superior adult can repeat eight.

One investigator measured recall of a moving picture seen once. Memory was tested three times—immediately after the movie, a month later, and three months later. The results appear in Figure 72. On all three

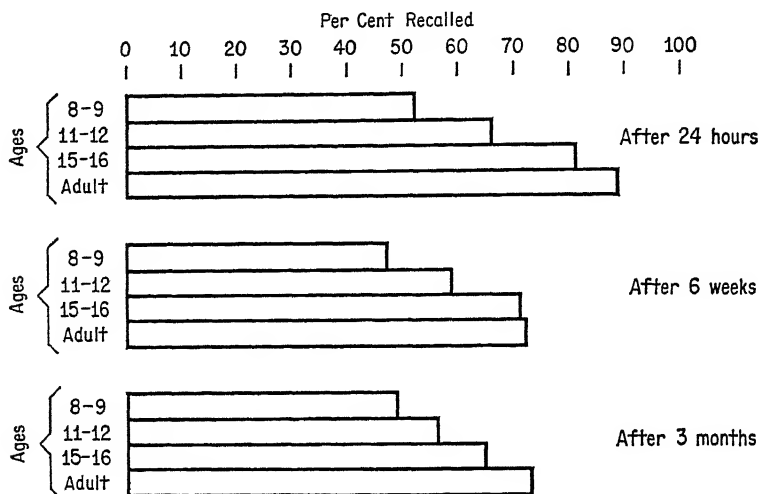


Fig. 72 *Memory for a Motion Picture*

Based on data in P. W. Holaday and G. D. Stoddard, *Getting Ideas from the Movies*, The Macmillan Company, 1933, Table XIII

occasions, the children remembered least. The adolescents recalled more than the children but were in turn inferior to the adults at all times.

Most studies of memory were made before 1925.¹ One that is slightly more recent is reported here. It involves the number of lines of poetry that school pupils of different ages could learn under the same conditions. The seven-year-olds averaged 9.8 lines, there is a steady gain at each successive age, the eighteen-year-olds averaging 22.4 lines. In all these studies there is clear evidence that ability to memorize increases with age. The results from this study appear in Figure 73.

It is not difficult to see why interest in memorizing has lagged. In former times memory was so overemphasized that the reaction against its use has been violent. The entire spirit of the progressive movement has been against rote learning. The essence of the reform has been to make school material so interesting and so meaningful to children that they will

¹ For a good study of the older type, look in W. H. Pyle, *Nature and Development of Learning Capacity*, Warwick & York, 1925, 119 pp.

not need to memorize. After some years of going to an extreme in the matter, educators have realized that for some kinds of material, memorization is a great timesaver. It should not be forced upon pupils, naturally, and they should learn when to select rote memory as an efficient means of learning and when to select some other method. Memorization does not insure understanding, and an adequate understanding sometimes makes memorizing unnecessary, but neither statement leads to the conclusion that learning "by heart" should always be avoided.



Fig 73 Memory for Poetry

Based on J. B. Stroud and R. Maul, "The Influence of Age on Learning and Retention of Poetry," *Journal of Genetic Psychology*, 42: 242-250, 1933.

Imagination

Imagination is obviously difficult to measure, and reports on it are few. Good reports are even fewer. Yet any high school teacher senses the development of imagination during the adolescent years. Adolescence is a period during which youngsters produce poems, stories, songs, and drawings in profusion, but no test has yet been devised to measure adequately the growth of imagination behind these developments. It is therefore necessary to resort to less objective forms of measurement.

One rather general investigation consisted in showing pictures to pre-adolescent and adolescent girls and asking them to write an imaginative story, of the fairy-tale type, about one of them.² Nearly half the pupils (ages 10 to 14) produced brief and banal stories, merely described the picture, or

² M. D. Vernon, "The Development of Imaginative Construction in Children," *British Journal of Psychology*, 39: 102-111, 1948.

included only bits of narrative imbedded in descriptive details, 44 per cent of the "stories" thus showed essentially no imagination. The remaining 56 per cent of the children wrote real stories that showed some degree of imagination, and the highest 9 per cent showed a great deal. It may very likely be that imagination is quite as much a function of personality structure as of age and that the trait develops with age only among those to whom the gods have given it in the first place.

One old but still interesting investigation³ is based on an analysis of compositions written by 2,642 boys and 2,138 girls between ages 9 and 18. The problem set them was to finish a story, the beginning of which was provided, given, also, were hints as to the nature of their compositions.

This is the beginning of a story about the moon.

"On a recent night," narrated the moon, "I was sliding through heavy clouds of snow. My beams tried to pierce them in order to see what was happening on earth. Finally, the clouds parted before me and . . ."

You are to finish the story. You may choose any one of the five themes suggested below.

- 1 The moon sees a shipwreck
- 2 The moon has a conversation with the giant, Roland, at the town hall of Bremen
- 3 The moon comforts a sick man who is lying in bed
- 4 The moon tells about a camp of hikers in the neighborhood of Bremen
- 5 The moon talks with a pupil who cannot prepare his lessons

By these directions, every pupil was led into a situation in which he had to use his imagination. He could, however, choose the topic around which his fancy played most readily, and he was free to introduce whatever embellishments and minor incidents might occur to him.

There were three outstanding differences between the themes of child and adolescent. The children represented the moon primarily as an acting being, while the adolescents described the moon's thoughts and emotions. The older pupils enlivened their stories with various minor episodes, droll happenings, and artistic touches, while the children clung to their central theme. The children's style was bald, but that of the adolescents showed numerous embellishments. The girls showed evidences of maturity earlier than the boys. The differences specifically in imagination are revealed in the two excerpts below, which are typical, respectively, of good childish and good adolescent imaginative power.

Child's Entire Story

I [the moon] watched a boy for a while through the window, then I knocked on the windowpane. The boy opened the window and peered out, looking around

³ Th. Valentiner, "Die Phantasie im freien Aufsatz der Kinder und Jugendlichen," *Beilage zur Zeitschrift für Angewandte Psychologie*, 1916, 168 pp.

curiously. Then I laughed at him and asked him how his schoolwork was going I climbed in through the window and sat down near him I was very willing to help him, just as I am always willing to help, and so I seated myself at his desk, took up the pen, and did some arithmetic for him . . . Then I told him he shouldn't lose courage so easily. After that I took up a book and read aloud to him (Boy, age 10)

One Section of Adolescent's Story

Finally, the clouds beneath me separated and I could see the earth, that lay in nighttime darkness Now I had the task of assigning jobs to my children, my dear little moonbeams Then I had to watch each one to see that he carried out his task accurately At first I watched my youngest moonbeam-child, for this one was greatly given to playing tricks and required my observation. With a merry glance he slid off my lap and went giggling down to earth On the market place of the city there stood a large house, where the old burgomeister lived At the back his great windows stood open in the room where he lay asleep My little moonbeam slipped laughing inside and—Oh Dear!—the rascal tweaked the worthy old gentleman's nose That I really hadn't expected Quickly I called my child back to me and forbade him strictly to go down again to earth tonight

Then I looked to see what another moonbeam was doing I saw a wanderer who had lost his way through a dark forest There appeared my moonbeam right before his feet, just as he, without realizing it, was about to fall into a deep ditch Now he could see his way and again find his path, and he thanked my dear child heartily for his friendly showing of the way. Then I saw another moonbeam whose friendly light fell into a room where a sick child was passing a sleepless night He had been tossing in the dark room, but when the moonbeam lightened the gloom, he became quiet and dropped off to sleep.

Suddenly I noticed to my consternation that my little rascal had slipped off my lap I ran my glance over the entire half of the earth that I am able to light up at once, but he was not to be seen Then one of his brothers told me where he was There he sat on a white cloud, whispering and giggling . . . Quickly I called him back to me and boxed his ears and told him that as punishment he must remain up here with me for a week (Boy, age 16)

The child's story is, on the whole, prosaic, the tale would not have varied materially if he had been helped by his uncle The adolescent not only puts in many imaginative touches, but he uses more space explaining how people reacted and felt than in telling what they actually did

The development of one girl in imagination from preadolescence into the earliest years of adulthood is well illustrated by the samples below. Although only one individual is involved, the study has at least the merit of being "longitudinal." This particular individual wrote much better poetry than the average, but its excellence does not prevent adolescent traits from appearing and disappearing with age It is pleasant that the poems are of high intrinsic merit,⁴ but their quality is irrelevant to the present dis-

⁴ The writers are indebted to Ursula Kroeber for permission to quote these few samples of her many interesting poems

cussion The first poem is a description of a scene, presumably based upon pictures but involving some degree of imagination, it has a standard form, it displays no emotion, and it gives practically no interpretation In its objectivity it is quite characteristic of late childhood The second poem shows in its details the same descriptive tendencies as the first, it also expresses fancy and imagination in abundance but not much emotion, although it certainly does create a mood The poem shows a breaking away from traditional form, a highly characteristic trait of adolescent work, and it makes repeated use of a word arrangement until it becomes almost a mannerism, that is, the author uses a noun, and immediately repeats it with an added adjective This discovery of a new technique and its overuse are extremely adolescent The theme of the third poem centers around love for an ideal mate, a typically adolescent topic In thought, it is the most conventionalized of the series, it is rather sentimental, and it does not have the restraint of later productions, but its relative lack of clichés and its imaginative detail make it far better than most adolescent love poems The fourth poem is again a lyric outpouring about youth and love, but on an appreciably more adult level There is much emotion, the elation in the first two verses being in contrast to the desolation of the third The feeling is so intense that it tends to swamp the meaning The second, third, and fourth are all untraditional in form They represent experiments and—in all probability—revolt against convention A period having these characteristics is likely to appear in the adolescent writings of those who accepted traditional forms as children and at least sometimes returned to them voluntarily in adulthood Revolt and experiment are an integral part of adolescence The last example is a sonnet, a typically adult form of poetry The theme shows a continuance of adolescent revolt against the idea of death, but there is the beginning of resignation The poem is deeply emotional but shows great restraint.

Rite Primeval (age 12)

Throb and thrum of native drum
Through the jungle booming,
Silhouettes seen through the nets
Of lianas, in the glooming

Leap and dance, plunge and prance
From eve till break of day,
Through the night an age-old rite
Beats on its rhythmic way

The Unicorns (age 14)

Hush, oh hush, be silent now, be silent, hush, be silent, be still,
Hush, be still, and you shall hear, if you listen,
The slow low gallop of the unicorn herd,

Cantering slow, cantering soft, down to the silver stream
 That sings as it flows and flows as it sings
 Hush, be still, you may hear the song
 Close your eyes in the dark, the dark, the sweet soft dark of the night or a dream,
 And white in the dark you shall see the flanks, the sides and the necks,
 The white arched necks of the unicorn herd,
 Cantering down to the silver stream, the singing stream.
 Arching their hoofs, their silver hoofs, flashing their horns, their spiral horns.
 Be still in the dark, the gentle dark, you may hear the stream and the galloping hoofs

*Krasnovsky*⁵ (age 16)

Here it is, here it is, it is like a hand on your eyelids, it is like a little bell in the rain,
 It is like the little stem of a flower

Awaken, oh my soul put forth your hands,
 Take up the hills and the waters of day-break, breathe on the wide slopes and the
 mist on the sea,
 Take up these things, that are love, find out your love's street and his hills, find out
 his sleep,
 Sit at his table, bow your head with his, and find out all his dreams
 Take up these things, that are love, are forever love, but for you only an hour
 Arise, awake, awake to your love, that calls to you with the tender voice of the dawn,
 With the tender voice of a dream . .

The Hunter (age 19)

O your youngness is like a deer
 stiff-legged like the wind
 now bright, now bleak.

Rose and fire is love, fire in the wind,
 the flute's voice of silence,
 and the highness of the moon.

Skull-white, the moon and the wind
 dying ash the rose, the fire,
 fallen the flute's voice,
 and the hunter is on the hills of Spring

Sonnet (age 22)

I am expert in youngness all the days
 Of verdure and of April have been mine
 And I have learnt the land where springs the vine
 Splendid to summer, have I to change these ways?
 Apprentice of mortality, to praise
 The windless autumn, the regretful wine
 That sucks its crimson from the year's decline,
 And I learn November's land, who am of May's?

⁵ Krasny means beautiful in Russian. Krasnovsky was an imaginary man, an ideal figure.

Immortal make the Spring those fortunate
 Who gallantly the green-strown ways ascend
 In youngness to their death, nor hesitate
 While I, though knowing where all seasons tend,
 Yet cling to their obscure descent, and wait
 As if for more than death, at seasons' end

The entire series of poems shows a high degree of imagination and a strong tendency to word pictures. In childhood the latter tended to be so profuse as to obscure the meaning rather than illuminate it. In the last two poems it is well controlled and kept subordinate to the meaning. Emotion is at first lacking, then there is a deluge of it, but finally it is put under sufficient restraint to be highly effective.

In the course of years, objective tests of imagination will doubtless appear. In the meantime, one must be content with the indications of increased imaginative power as revealed by such evidence as that shown above.

Suggestibility

There has not been much recent research into the degree of suggestibility at different ages, but one investigation seems worth reporting.⁶ The results were expressed in two ways: the per cent of pupils at each age from five to eighteen who were suggestible and the per cent of responses of a suggestible character shown at each age. Both curves appear in Figure 74. Small children scored as very suggestible. During late childhood and adolescence the curves began to fall steadily. At the age of eighteen, only 18 per cent of the students and 4 per cent of the answers were classified as suggestible. Teachers soon learn that adolescents cannot be guided by suggestion as easily as children can be. The common form, "Wouldn't you like to read another chapter?" has to be abandoned and something more mature substituted.

Reasoning, Thinking, Judging, Obtaining Insights

It is probable that these words all refer to the same kind of ability to deal constructively with facts, to rearrange them, to draw conclusions, or to "see through" them. Investigations in this field are numerous, but only a few samples can be presented. The discussion will begin with a listing of some "comprehension" questions of the Stanford-Benet scale, will continue with a summary of an experiment with junior high school children testing their ability to see through a poem, will go on to four studies of the ability

⁶M. L. Reymert and H. A. Kohn, "An Objective Investigation of Suggestibility," *Character and Personality*, 9:44-48, 1940.

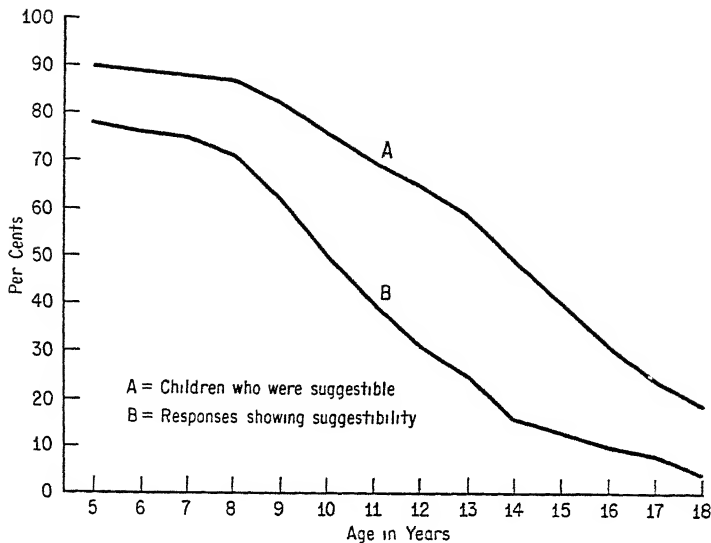


Fig 74 *Changes in the Degree of Suggestibility with Age*

Based on Tables 3 and 4 of M. L. Reymer and H. A. Kohn, "An Objective Investigation of Suggestibility," *Character and Personality*, 9 44-48, 1940

of adolescents to give explanations, to reason about conclusions, to match specific illustrations with general principles, and to "see through" a parable or a cartoon to its meaning, will discuss the possible use of the ability to 'see through' jokes as an indication of mental maturity, and will conclude with an analysis of the methods that college students use in solving problems.

1. There is, first of all, the Binet Examination, with its series of "comprehension" questions. Growth is reflected by successive steps, as follows:

Age 4 Why do we have houses?

Age 7 What is one thing to do when you have broken something that belongs to someone else?

Age 8 What makes a sailboat move?

Age 10 Give two reasons why most people would rather have an automobile than a bicycle

Age 11 Donald went walking in the woods. He saw a pretty little animal that he tried to take home for a pet. It got away from him, but when he got home his family burned his clothes. Why?

Average Adult What does this saying mean? If you would eat the kernel you must crack the nut?

Superior Adult Give three reasons why people use typewriters that cost so much when they can get pen and ink for a few cents?

⁷ L. M. Terman and M. A. Merrill, *Measuring Intelligence*, Houghton Mifflin Company, Form L, described on pp 75-132. Used by permission of the publisher

These tests require an ability to judge and draw inferences. Many years ago Binet and Terman realized the value of such tests in measuring basic intelligence

2 Three decades ago, an investigator studied a different type of insight by asking grade and junior high school pupils to "see through" a short "poem" to its meaning

I ate a small apple,
It tasted good, and yet—
I wish that small green apple
And I had never met

Why does he wish he had never met the apple?
Because the apple made him sick
Because the apple was sour
Because the apple had worms
Because he was not hungry
Because green apples are not good for children^s

Figure 75 gives the curve for growth in insight as measured by a total of five poems, also the curve for the poem quoted above. This form of thinking shows a steady gain throughout the grades.

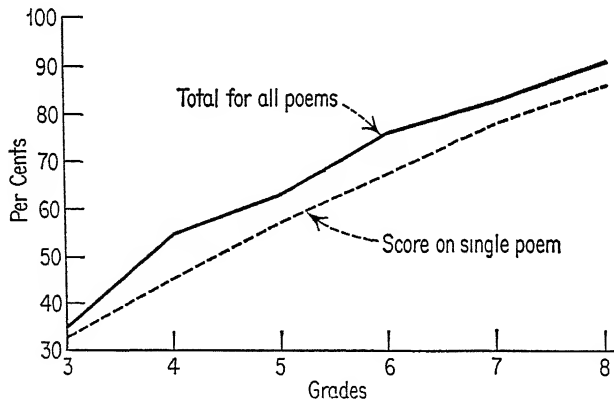


Fig 75 Growth in the Ability to Understand the Meaning of Poems

From W. H. Pyle, "An Experimental Study in the Development of Certain Aspects of Reasoning," *Journal of Educational Psychology*, 26: 546, 1935. Used by permission of the Journal.

3. Investigations of how children and adolescents explain phenomena give evidence concerning the ability to generalize and reason. In one study, pupils between the ages of eight and sixteen were asked such questions as why pebbles sink when thrown into water, why a windmill turns, why water runs up into a tube that is small enough, what makes a bicycle go,

^s From Pyle, *op cit*, p. 544. Used by permission of Warwick & York.

and the like. The answers from which the students were to choose were of three general types, which may be designated as phenomenistic, logical, and mechanical. The first type of explanation includes such answers as "The pebble sinks in water because it is white", the child has put together two phenomena that have no connection beyond mere contiguity in time or space. The logical type of answer gives an explanation of sorts, but it is incomplete. The pupil choosing such an answer uses such concepts as weight, density, or gravity, and his explanation is sensible as far as it goes,

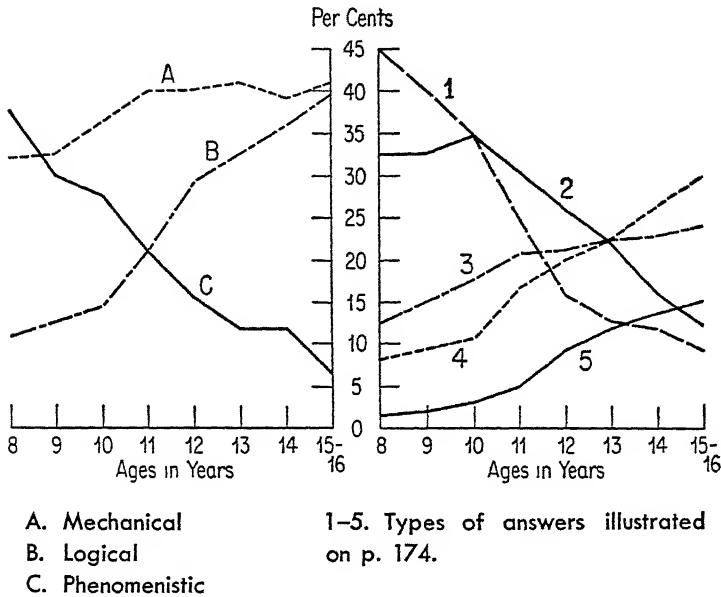


Fig 76 *Growth in the Understanding of Mechanical Phenomena*

Based on J. M. Deutsche, "The Development of Children's Concepts of Causal Relations," *University of Minnesota Monographs in Child Welfare*, no. 13, 1937, pp. 139, 141

but it is given in static terms. The third type of answer includes such explanations as "A bicycle goes because, as the pedals are pushed, the chain makes the wheels turn." This explanation is made in terms of movement. The incidence of these three types of explanation, as given in the first part of Figure 76, shows a decrease in the phenomenistic and an increase in the other two during the years of preadolescence and the early years of adolescence.

The second part of Figure 76 shows results from a single question about what should be done to balance an uneven seesaw. The explanations supplied were of five types, of which the following examples may be given.

To balance a seesaw, a bigger block is needed at one end than the other because:

- 1 One end is lower than the other, and the other end is higher
- 2 The board is not even on its two ends
- 3 The two sides do not balance
- 4 One side is a good deal heavier than the other
- 5 One side is longer and heavier, and needs a weight to balance it ⁹

At age 8, answers of type 1 are commonest, and those of type 5 are practically nonexistent, the types occur in frequency in order from 1 to 5. At ages 15 and 16, the order is almost exactly reversed. It seems curious that only 15 per cent of the oldest group marked the fifth type of answer.

Adolescent ability to obtain insights, to judge, or to think is well measured by two old but distinctive and interesting experiments. The first of these presents results of a test designed to investigate comprehension of the sayings and parables of Jesus ¹⁰. In this investigation, a series of objective tests was given to 637 children and adolescents, who were then classified on the basis of mental age. The study reports the percentage of children at each mental age who were able to understand each saying or parable. As illustrations, results of two parables will be shown: (1) "The Sower" and (2) "The Two Foundations". The development of comprehension for three famous sayings will also be presented: (a) "Judge not, that ye be not judged", (b) "If you love God, keep his commandments", (c) "Men love darkness rather than light because their deeds are evil." The results are presented

⁹ The first explanation lacks mechanical facts, general principle, and cause and effect relationships, the second contains a mechanical fact but is incomplete and gives no principle, the third mentions a principle but does not tie it in with the mechanical facts, the fourth gives the facts but lacks a principle, the last contains a fairly complete mechanical explanation, with the principle.

¹⁰ For the younger generation that does not know its Bible, these two parables are quoted below.

Matthew 13:3 Behold, a sower went forth to sow, and as he sowed some seeds fell by the wayside and the fowls came and devoured them up. Some fell upon stony places where they had not much earth and forthwith they sprung up because they had no deepness of earth, but when the sun was up they were scorched and because they had no root they withered away. And some fell among thorns and the thorns sprung up and choked them. But others fell on good soil and brought forth fruit, some a hundredfold, some sixtyfold, and some thirtyfold.

Matthew 7:24 Therefore whosoever heareth these sayings of mine and doeth them, I will liken him unto a wise man which built his house upon a rock, and the rain descended, and the floods came, and the winds blew and beat upon that house, and it fell not, for it was founded upon a rock. And everyone that heareth these sayings of mine and doeth them not shall be likened unto a foolish man which built his house upon the sand, and the rain descended, and the floods came, and the wind blew and beat upon that house, and it fell, and great was the fall thereof.

The student might also note the familiar phrases that have entered English speech from just these two parables: "to fall by the wayside," "to found one's house upon a rock," "and the rain descended and the floods came," "and great was the fall thereof." In miniature, these excerpts show the effect of Bible reading in previous generations upon everyday speech.

in Figure 77 (a) The gains between the mental ages of eight and eleven are gradual. Then there are large increases up to about fourteen, after fourteen the gain sometimes continues and sometimes not, depending largely on the height already reached by the curve at that time. In this investigation one finds a reflection of an increase in ability to understand allegories and double meanings. Teachers often sense this development, but proof of it is not always found in investigations using objective tests.

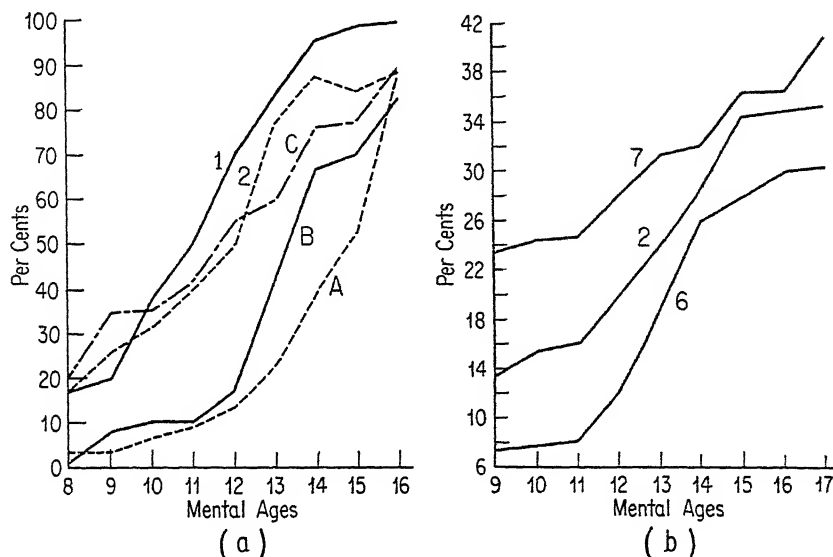


Fig 77 *Comprehension (a) of Sayings and Parables of Jesus and (b) of Cartoons*

(a) Based on S. P. Franklin, "Comprehension of the Sayings of Jesus," *University of Iowa Studies in Character*, 2: 1-63, 1928.

(b) Based on L. Shaffer, "Children's Interpretations of Cartoons," *Teachers College Contributions to Education*, no. 429, 1930, pp. 24, 32, 34 (Cartoons 2, 6, 7).

Another investigation concerns the ability to interpret the meaning of cartoons. Although this study was designed originally to determine the appropriateness of cartoons for inclusion in history texts, the results are equally useful in the present connection. The children looked at the cartoons and selected from a number of possible statements the one which seemed to them to be the best interpretation of each picture's meaning. The results were grouped according to the mental age of the children. Figure 77 (b) shows the curves for three cartoons. In general at the beginning of the mental ages that are normal for the adolescent years there is a marked rise in the curves.

Another investigator traced the ability among students in the ninth grade through the second year of college to match scientific illustrations with principles and to evaluate the correctness of explanations. For the first part of the test, the students were provided with a short list of scientific principles and a longer one of illustrations and were asked to tell which items were examples of which principles, all of which might be used as many times as they seemed relevant. Incidentally, the investigator first designed his test by selecting principles from a report of those accepted by a dozen curricular studies as being appropriate for high school, but the resulting test was so hard that he had to reconstruct it, using the principles from a

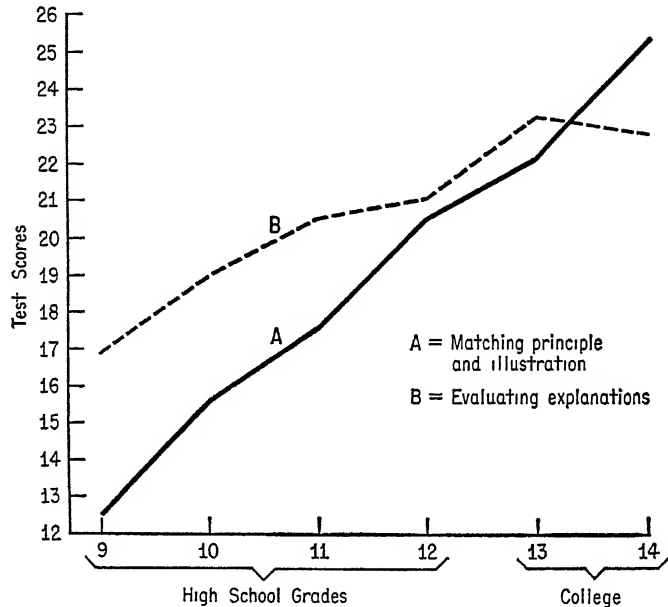


Fig 78 *Growth in the Ability (A) to Match Principles with Illustrations and (B) to Evaluate Explanations*

Based on T. B. Edwards, "Measurement of Some Aspects of Critical Thinking," *Journal of Experimental Education*, 18: 268, 1950

report that contained only those "suitable" for elementary school pupils. One wonders how suitable! The scores made in successive years appear in Figure 78. For the second part of the test the investigator presented a short passage about common colds, followed by six questions concerning prevention, treatment, cause, value of current research, effect of vitamins, and need for medical attention. For each question there were four possible answers: (A) one was totally incorrect, (B) one was totally irrelevant, (C) one was

fairly good but contained an inaccurate or irrelevant detail, and (D) one was correct. The students did not mark the right answer. They compared each answer with every other and stated which was the better of each pair. They compared, therefore, A with B, A with C, A with D, B with C, B with D, and C with D. Since there were six such comparisons and six questions, the total possible score was 36. The highest actually made seems to have been 28. As shown in Figure 78, the average gain for the six years after entrance to high school was only from 16.8 to 23.5 points, a gain that could easily be due mainly to the usual elimination of duller students from year to year.

4 It is probable that an age scale could be made by using different kinds of jokes that seemed amusing to children of different ages. The Binet scale has one item of this sort in the "absurdities": "The police found the body of a man cut into 27 pieces, and they think he killed himself." Those children who "see through" this gruesome statement are greatly amused.¹ Children who are too immature mentally do not see any contradiction in the two halves of the sentence. To see the point of any joke, the hearer must know whatever facts are needed for the interpretation, must have enough mental power to make associations among several elements all held in his mind at once, and must have had some experiences that are relevant to the situation portrayed in the joke. Nothing is more frustrating than trying to understand the jokes in the "funny" magazines of another country—even when they are in one's own language. Thus, the Englishman may find no humor in the *New Yorker*, and some Americans cannot imagine why the English think the cartoons in *Punch* are amusing. Similarly, if one does not know that Dedham is about five miles from Boston or that a main artery south goes through it, and if one has never known any proper Bostonians, one fails to understand the joke about the Boston lady who traveled from her home to California, when asked by what route she had crossed the country, she replied, "Via Dedham." But without the proper background, this joke falls completely flat.

Children do not, in general, care much for verbal jokes and witty remarks. They do not understand them, they are still not quite sure what is real and what is nonsense, and the whole situation makes them feel insecure. Slapstick and mimicry they can grasp and appreciate, but jokes are likely to make them uncomfortable. At some time between twelve and fourteen most children begin to "see through" jokes and therefore to enjoy them.¹¹

One well-known authority on the psychology of childhood and adolescence summarizes the development of humor from 10 to 14 years of age in the list that appears on the following page.

¹¹ M. Wolfenstein, "Children's Understanding of Jokes," *Psychoanalytical Studies of Children*, 8:162-176, 1954.

- Age 10 Humor is of obvious type and not funny to adults Some of it is slapstick, but much of it is reaction to anything unexpected
- Age 11 Humor is "corny" and often smutty Much laughing at misbehavior and minor accidents Child can understand a little adult humor, but his own humor is still of a different type
- Age 12 Many practical jokes of an obvious kind Teasing Some exchange of banter with adults
- Age 13 Rather less humor than at earlier or later ages, but the beginnings of sarcasm as a form of humor.
- Age 14 Humor used against parents or others in authority, smutty jokes among members of one's own sex, dislike for display of humor on the part of parents
- Age 15 Beginnings of ability to see something funny when one is oneself teased or "kidded" Beginnings of irony as a form of humor
- Age 16 Ability to understand cartoons and other more subtle forms of humor Participation in adult jokes and beginnings of spontaneous production of humor on an adult level¹²

One German investigator has described various types of jokes—and jokers There is the direct, obvious, uncomplicated, jolly, practical joker and teller of anecdotes, to whom everything is funny¹³ He does not plan his humor, and he is not really witty, he just bubbles over, laughing merrily at his own jokes, many of which are rather indecent. A second type is the solemn-faced, subtle individual whose jokes are polished, intentional, highly verbal, and witty, with hidden meanings that are sometimes so well hidden that the listener is not quite sure whether or not the remark is intended to be funny. A third type delivers his somewhat gruesome jokes with a sledge hammer and almost invariably at the wrong time and to the wrong person Professional humorists and satirists are of the second type Everyone knows at least one person who fits well into each of the above descriptions

5. A detailed and interesting study in the ability of college students to solve problems has been carried on by means of personal interviews, during which, after an initial period of getting acquainted, the student talked out loud as he thought through his answers¹⁴ The object of the investigation was to trace the thought process and to note where and why it went astray—not to determine how many problems a student could solve. As a student thought aloud, the observer made a record of his errors and miscues, using the list opposite, of which only a few of the details are reproduced.

¹² A. Gessell, F. L. Ilg, and L. B. Ames, *Youth The Years from Ten to Sixteen*, Harper & Brothers, 1956, pp. 343-346

¹³ M. Koch, "Konstitutionelle Varianten des Sinnes für Komik," *Zeitschrift für Psychotherapie, Medizin, und Psychologie*, 5 203-214, 1955

¹⁴ B. Bloom and L. J. Broder, "Problem-Solving Processes of College Students," *Supplementary Educational Monographs*, no. 73, The University of Chicago Press, 1950, 109 pp.

I. Understanding the nature of the problem

A. Ability to start the problem (comprehension of directions)

- 1 Rereads directions aimlessly—does not concentrate sufficiently to understand directions on first reading
- 2 Lacks understanding of the terms and phrases in the directions
- 3 Depends on the questions rather than the directions for an understanding of the nature of the problem.

B. Ability to understand the specific problem

- 1 Has difficulty as a result of improper reading of directions
 - a Makes no attempt to read the directions
- 2 Forgets or loses sight of the directions.

II. Understanding of the ideas contained in the problem

A. Ability to bring relevant knowledge to bear on the problem

1. Possesses little or no knowledge about the ideas contained in the problem.
- 2 Is unable to use whatever relevant knowledge is possessed because of the presence of unfamiliar terms and ideas

B. Ability to comprehend the ideas in the form presented in the problem

- 1 Is unable to translate the difficult and abstract terms of the problem into simple and more concrete terms or into more familiar terms

III. General approach to the solution of problems

A. Extent of thought about the problem

1. Makes little or no use of hypotheses as to the correct solution
- 2 Makes little or no attempt to set up and use criteria which the solution must meet . . .

B. Care and system in thinking about the problem

1. Makes little or no attempt to reorganize the problem in order to gain an understanding of the material
- 2 Makes little or no attempt to delimit the possible answers or choices

C. Ability to follow through on a process of reasoning

- 1 Carries reasoning part way through to completion, then gives up

IV. Attitude toward the solution of problems

A. Attitude toward reasoning

- 1 Takes the attitude that reasoning is of little value—one either knows the answer or does not

B. Confidence in ability to solve problems

- 1 Makes little attempt to attack the problems which appear to be complex and abstract
- 2 Makes only a superficial attempt to reason through a problem, then gives up and guesses . .

C. Introduction of personal considerations into problem solving

- 1 Has difficulty in maintaining an objective attitude in certain problems because personal opinions play an important part . . ¹⁵

¹⁵ *Ibid*, pp 106 ff Used by permission of The University of Chicago Press.

This analysis breaks down the process of problem solving into four steps: understanding what is to be done, understanding the ideas contained in the problem, approaching the problem, and attitude toward the solution obtained. As illustration, the reports on two students are quoted below.

1 *Understanding the nature of the problem* A major factor [Louis's] lack of understanding of the problem is the fact that he misreads and misinterprets directions. This results, in many instances, in his attempting to solve an entirely different problem from the one posed. He rarely focused attention on the essential parts of the directions, seemingly reading them as an unimportant part of his attack on the problem. . . .

Nancy seems to have little difficulty understanding the nature of a problem. However, if the problem is exceedingly complex or if the solution is not immediately apparent, she becomes so involved in the details of the problem that she loses sight of the end she is seeking. As she reads the directions, she sometimes restates them in her own words, picking out the relevant ideas and determining exactly what she is to look for.

2 *Understanding the ideas contained in the problem* Louis deals almost entirely with the terms as given in the problem, making no attempt to define these terms or to translate them into more familiar terms related to his own experience. He appears to have a somewhat limited technical vocabulary, and this proves to be a definite handicap to his problem-solving. He is much disturbed by the fact that an addition or omission of one or two words in a problem changes its entire meaning. . . .

Nancy seems to have little difficulty understanding the ideas involved. When she is uncertain about a term used or has difficulty visualizing a situation, she seems to try to relate it to a concrete example or to establish a mental picture in order to clarify the situation for herself. She presents a particularly good example of one who can relate her knowledge and experience to the problem at hand.

3 *General approach to the solution of problems* Louis seems to do little independent thinking in arriving at a solution, relying rather on the choices the examiner supplies. He selects an answer and attempts to justify it, rather than thinking through to the solution and then selecting an answer. Many times he does not know how or where to begin to attack the problem.

Nancy is continually asking herself questions about the problem as she proceeds with the attack. She seems to answer these questions and then to go ahead on the basis of the answers and assumptions she has made. If she cannot attack the problem as a whole, she breaks it into parts and attacks each part separately. Her habit of questioning the various parts of a problem seems to be the directing influence in her ability to break down a problem.

4. *Attitude toward the solution of problems* Louis feels that he does not have an adequate background with which to attack certain problems, and he refused to attempt the solution of these problems. He indicated that he believes it is unfair to guess at an answer. He will not select an answer unless he feels that he has a basis for his choice. (This basis may at times be quite flimsy.) When an answer is chosen, it is usually given in a rather positive and assured manner. He takes

the attitude that one does or does not know the answer and he makes little attempt to reason through to a solution. Another source of considerable difficulty for this student is that he cannot divorce his personal values from the problems he is solving and seems unable to maintain an objective attitude. Thus, he chooses an answer "that would be not only logic, but also uses my interpretation of equity."

Nancy expresses some feelings of inferiority regarding her ability to attack certain problems. A typical reaction in a problem dealing with the laws of exponents was, "Wonder if I remember this. . . . What is given in the product when you first learn coefficients? Darn it, Nancy, you should know this. Coefficients. How did they do this? I can't remember at all." She usually makes some attempt to find an answer for each problem. She makes a great effort to explore her knowledge about a subject to determine what is relevant to each problem.¹⁶

It will be noted that there are two chief sources of difficulty: the student either does not find out just what he is to do before he starts or he does not know certain necessary facts.

Summary

With the oncoming of adolescence many special facets of intelligence develop at a rapid pace. The child does not memorize, or see humor in many of its forms, or reason as well as an adolescent, although he is far more suggestible. One outstanding development of the adolescent period is the ability to "see through" situations of all kinds to their inner meaning. High school boys and girls still make many errors in reasoning—as who does not?—but they show great progress over their capacity in this respect during their childhood years. A wise teacher will make assignments or set problems that call forth the full use of these newly developed special abilities.

References for Further Reading

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10

Intellectual-Cultural Interests

The adolescent boy or girl has many interests. Some of them are continuations of childhood pursuits, but many are new. High school pupils show their interests by their preferences for games or other diversions, by their choice of books, magazines, radio or television programs, and motion pictures, by their ambitions, by the type of things they collect, by the kinds of books they read. The exact form that these interests take depends upon the environment. Because of the interrelation between adolescent drives and the environmental possibilities for their expression, the term "intellectual-cultural" has been used in describing these interests. The materials on this subject are diverse and numerous. If all relevant data were summarized, one would have a whole book. The writers have tried, therefore, to select a relatively few studies that illustrate the main trends. There will be an introductory section on the manner in which adolescents spend their time. The next section deals with interest in the three main methods of mass communication and entertainment at present—television, radio, and motion pictures. There is a brief section on collecting, a longer one on play, and a closing section on interest in various types of reading—books, newspapers, magazines, and comics.

Adolescent Activities

Various investigators have had a look at the adolescent's day, but unfortunately the reports antedate television and therefore do not give a complete reflection of life at the moment. Results from one study, however, are presented in Table 4, which probably gives a fair picture, if one adds television-viewing under the heading of commercial entertainment. It might be noted that the week, even without television, was rather full. Boys and girls participated in much the same activities, but with varying degrees of interest. Girls, in general, did more work around the house than boys, read more, went to movies a little more often, had more hobbies, were more social, expressed more interest in religion, art, and music, and

Table 4 USE OF LEISURE TIME

<i>Boys Who Participated in Each Activity During Sample Week (%)</i>	<i>Activity</i>	<i>Girls Who Participated in Each Activity During Sample Week %</i>
	A Schoolwork	
87	1 Studying	94
	B Commercial entertainment	
92	2 Radio listening	90
67	3 Movie attendance	72
27	4 Attendance at concerts, lectures	38 (+11)
	C Games	
66	5 Playing games	60
68 (+21)	6 Watching games	47
40 (+13)	7 Supervised sports	27
57 (+30)	8 Unsupervised sports	27
	D Social pursuits	
24	9 Chaperoned parties	42 (+18)
29	10 Unchaperoned parties	37
29	11 School activities	32
15 (+10)	12 Scout activities	5
85	13 Loafing with friends	90
40	14 Club meetings	52 (+12)
	E Solitary pursuits	
82	15 Reading	91
33	16 Hobbies	42
43	17 Loafing alone	61 (+18)
	F Lessons outside school	
23	18 Music	43 (+20)
5	19 Other classes	14
	G Religious activities	
43	20 Church attendance, religious clubs, etc	58 (+13)
	H Homework	
73	21 Odd jobs around house and housework	86 (+13)

Numbers in parentheses indicate differences of 10 per cent or more

took more lessons outside the school—dancing, painting, music, drama. The boys surpassed girls in all activities having to do with sports. The girls spent more time in loafing alone.

Interest in Television, Radio, and Motion Pictures

Aside from newspapers, which have been a means of disseminating information and culture for a long time, there are four important mass media—the movies, the radio, the record player, and television. All of these have important roles in the lives of boys and girls. Of these media, the movies have the longest history and television the shortest. Radio and television have become almost universal American phenomena, as is shown in Table 5.

Table 5 HOMES HAVING TELEVISION OR RADIO SETS

Year	Number of Homes (In millions)	Number of Radios (In millions)	Number of Television Sets (In millions)	Per Cent of Homes Having	
				Radios	Television
1925	27.4	2.7		10	
1930	30.0	13.8		46	
1935	31.9	21.5		67	
1940	34.8	28.5		82	
1945	37.6	33.1		88	
1950	42.9	40.8	3.1	95	7
1951	44.2	41.9	10.0	95	23
1952	44.7	43.3	16.0	97	37
1953	45.6	45.3	21.2	99	46
1954	47.6	46.6	27.7	98	58
1955	47.8	47.0	32.0	98	67
1956	48.0	47.0	35.1	98	73

Based on A. Nielson, *Radio and Television*, Audience Research, Bureau of Business Research, School of Business Administration, University of Michigan, 1957, p. 10.

There have been a number of rather violent articles pro and con concerning television, but there are thus far only a relatively few reports that deal with actual investigations or experiments. It is already apparent, however, that children have taken television to their hearts, and it is probable that they are greatly influenced by what they see and hear. A few reports seem especially pertinent.

One investigation¹ in 1950 of 2,135 school children in the elementary schools and the junior high schools showed that 43 per cent of them came

¹ P. A. Witty, "Children's, Parents', and Teachers' Reactions to Television," *Elementary English Review*, 27: 349-355, 1950.

from homes in which there was a television set (At the present time, the percentage would be at least 75.) Another 30 per cent of the children frequented the homes of friends who had a television set. The average amount of time spent each day in watching television was over three hours for children in whose homes the sets were located and nearly two hours for the visitors. These same homes owned 1.76 radios apiece. Seventy-five per cent of the children preferred television to radio, and 35 per cent said they attended the movies less frequently since they had had television in their homes. In grades 3 through 8, 31 per cent thought television helped them in their schoolwork, and 67 per cent thought it interfered. Of the 1,736 parents interviewed, 55 per cent approved wholeheartedly of television for their children, 25 per cent thought some programs good and some bad, and only 13 per cent really disapproved. The children's teachers were less enthusiastic. None of them really approved of television, and 48 per cent felt strongly against it. At the high school level the report was much the same.² Among 447 students, one half (in 1950) had television in their homes, and another third watched the programs regularly at neighbors' houses, leaving only a sixth who had no access to a set. On school days the viewing was slightly below four hours a day for the set owners and two and a half hours for those who watched other people's sets, but over the week ends the time rose to more than four and three hours, respectively. Of the 223 high school students who had television at home, 33 per cent hardly ever listened to radio any more, 42 per cent listened much less than formerly, 20 per cent listened about as much as usual, and the remaining 5 per cent preferred radio to television and therefore listened at least as much as, if not more than, they had previously done. In a study made three years later, 85 per cent of the children reported that they watched television for an average of 16 hours a week, and 59 per cent said television was their first choice as a leisure-time activity.³

Another study reports the amount of time spent each week by school children from the first grade through the twelfth in watching television. In the interests of simplicity, the number of minutes has been reduced to the nearest half-hour. The amount of time for both boys and girls was greatest between the sixth and eighth grades. At most levels the girls averaged higher than the boys. The figures in Table 6 work out to something between nearly two and nearly four hours a day. One wonders how school pupils find time enough for this activity. One source of time is a reduced listening to radio. In one study the hours each day devoted to radio had been reduced from 4.2 hours for the years 1947, 1948, and 1949 to 2.5 hours

² Anon, "One High School Surveys Television's Effect on Pupils," *School and College Management*, 20 21-22, 1950

³ L. F. Scott, "A Study of Children's TV Interests," *California Journal of Educational Research*, 4 162-164, 1953

Table 6 HOURS SPENT WATCHING TELEVISION

Grade	Average Number of Hours per Week	
	Boys	Girls
1	12	16
2	16½	15
3	14½	18
4	19	19
5	17½	23
6	25½	22½
7	27½	21½
8	23	23½
9	20	21½
10	20	19
11	19½	18
12	19	19

Based on T C Battin, *TV and Youth*, National Association of Radio and Television Broadcasters, 1954

for the years 1953, 1954, and 1955. Since the children spend the same amount of time in school as usual, the additional hours for watching must come from play, from mealtimes, or from sleep.

There are two rather interesting studies of the amount of time devoted by children and adolescents to activities that are dependent upon mass media. In one case school pupils were asked to tell how much time they spent in various activities before and after they had a television set in their homes. The results appear in Table 7. One can see from the figures in

Table 7. MINUTES SPENT EACH DAY IN VARIOUS ACTIVITIES

	Before Television	After Television	Amount of Change
Reading magazines	17	10	— 7
Reading newspapers	39	32	— 7
Listening to radio	122	52	— 70
Television	—	173	173
Total	178	267	

Based on T E Coffin, "Television's Impact on Society," *American Psychologist*, 10 630-641, 1955

this table that an average of 84 minutes a day for the watching of television came from less reading of magazines and newspapers and from less listening to the radio, in addition to 99 minutes taken from some other activity.

Elementary school children reported their favorite programs in this order: *I Love Lucy*, *Superman*, *Red Buttons*, *Dragnet*, *Roy Rogers*. The

high school pupils voted for *I Love Lucy*, *Dragnet*, *Colgate Comedy Hour*, *Arthur Godfrey*, *Red Buttons*. Their parents listed their preferences as *I Love Lucy*, *What's My Line*, *Omnibus*, *Arthur Godfrey*, *Mr Peepers*. The selection of the teachers was much the same, except that they put *Meet the Press* first. The similarity of votes suggests that television is, or easily can be, a family affair.⁴

One study of TV preferences from grade school through college gives results as to type of program found interesting rather than specific offerings. At all levels the males selected news, comedy, and sports as their favorites, with drama and variety shows running fairly close behind, all-music, talks, and religion brought up the rear. The girls voted for news and comedy first, but substituted drama and variety shows for sports, they rated popular music and religion higher than did the boys. The reported preferences for radio programs are almost identical with those listed above.⁵

There seem to be two schools of thought about the effect of listening to radio or watching television upon the health and emotional adjustment of children and adolescents. Most of the earlier articles about radio listening reported undesirable emotional effects upon children.⁶ Their blood pressure went up and their pulses beat more rapidly, especially during exciting episodes. Attendance at horror films or addiction to crime stories over the radio or—more recently—watching similar presentations on television was reliably reported to produce nervousness, fear of being kidnaped, difficulty in sleeping, nightmares, and nervous habits, such as nail biting. These effects were especially noticeable if the children listened or watched during the evening. Studies of this type appeared with fair frequency before 1950. Two more recent studies contradict these earlier ones. What is not at all clear is whether the nature of the programs has improved, with the elimination of those elements that were precipitating the observed symptoms, or whether modern culture has bred a race of children who have been exposed from the cradle to mass communication and are therefore not as naive about it as those of earlier decades. Both these recent studies compare children who are chronic and excessive listeners to the radio with⁷

⁴ P. A. Witty, "Comparative Studies of Interest in TV, Comics, and Movies," *Educational Administration and Supervision*, 40 321-336, 1954.

⁵ "TV Programs," *Kansas Radio-TV Survey*, 1953, p. 84.

⁶ See, for instance, J. J. De Boer, "Radio and Children's Emotions," *School and Society*, 50 369-373, 1939; F. Frank, "Chills and Thrills in Radio, Movies, and Comics: A Psychiatric Opinion," *Childhood Education Monographs*, Vol. XXV, no. 2, 1948, 42 pp., and "Comics, Radio, Movies, and Children," *Public Affairs Pamphlets*, no. 148, 1949, 32 pp., and M. I. Preston, "Children's Reactions to Movie Horror and Radio Crime," *Journal of Pediatrics*, 19 147-168, 1941.

⁷ F. Heisler, "Comparison between Those Elementary School Children Who Attend Moving Pictures, Read Comics, and Listen to Serial Radio Programs to Excess and Those Who Indulge in These Activities Seldom or Not at All," *Journal of Educational Research*, 42 182-190, 1948; R. A. Ricciotti, "Children and Radio: A Study of Listeners and Non-Listeners to Various Types of Radio Program, in Terms of Selection, Ability, Attitudes, and Behavior Measurement," *Genetic Psychology Monographs*, 44 149-159, 1951.

those of the same age who do not listen at all or only on rare occasions. Neither investigator found any fundamental difference between the two groups as regards nervous habits, interrupted sleep, fears, or dreams by either day or night. Either the earlier reports concentrated upon children who were already nervous, in which case the listening might well have a bad effect, or else children have become more sophisticated and do not become emotional, as they did earlier. This latter interpretation may be the correct one.

One habit of most adolescents is to keep the radio going while they study. Many parents have been greatly distressed, and some did forbid radio playing during study hours, but as soon as the adolescents were old enough to follow their own preferences, they promptly turned it on again. There has been some research into the effects of this habit upon studying. To the surprise of the investigators, those students who always studied with the radio on did better schoolwork than those who never played it while studying. The pupils themselves report only beneficial results. The writers have quizzed several adolescents to find out why they could study better with a distraction than without one and have found reasonably good explanations. To begin with, many youngsters love noise and companionship and abhor silence and solitude. The emphasis upon socialization, beginning in nursery school, has had its influence, and by the years of adolescence, many boys and girls have become thoroughly socialized. They would prefer to study together, but since this arrangement is often impracticable, they compromise by turning on the radio. The nub of the matter is that they have been educated in the midst of social stimuli and cannot bear solitude. Silence is to them not a blessed relief from noise but an absence of all supporting human presence. Adolescent testimony is to the effect that they do not actually listen to the radio, but as long as it is going, they are not alone. Quiet and solitude are correlated in their minds with rejection and unpopularity, while noise and chatter mean acceptance and success. Hence they find silence unbearable, distracting, and frightening. Since they cannot have their peers with them every minute, they substitute the radio, which produces enough background commotion to let them relax. This unique point of view—unique to an older generation, certainly—is a possible result of the present intense socialization from the cradle to the grave, and those of us who grew up without such pressure will have to accept this curious by-product and let the radio run on and on. It comforts the adolescent and even helps him study. Other adolescents, especially in the fifteen-nineteen group, turn their radios to the disc jockeys for a wide variety of music, which helps them to “unwind” after a day of intense stimulation. Still others use the sound as an intermittent resting place for their thoughts, a sort of aural coffee-break. Carefully calculated use of these last two approaches was first made extensively during World War II in industrial plants, and industries financed research on the optimum sound-level and

sound-quality because it is well worth while to them in terms of worker-effectiveness

Almost all the studies upon the attendance of children and adolescents at movies and on the effects movies had upon them were made at least a decade ago. At the present time, the attendance is certainly much lower than it was. According to one report, the average attendance at movies in one sample population dropped from 2.8 times a week to 0.7 times a week from pre-television to post-television days.⁸ If this is a representative sample, the motion picture is not at present the force in the lives of adolescents that it once was. In 1944 no less than 75 per cent of a large adolescent group attended movies at least once a week, and 30 per cent attended three to five times a week.⁹ Such figures are no longer true. One may, however, assume that such films as are seen produce effects similar to those formerly produced, except that a less frequent attendance might affect the intensity—either by enhancing the effect of the occasional movie or by diminishing the cumulative effect of overattendance. A study made in 1950–1951 showed movie attendance from age 15 to age 25 to average once a week.¹⁰

It is to be assumed that boys still like comedies, westerns, mysteries, and general blood-and-thunder, with the more shooting and general noise the better. Adolescent girls probably still prize love stories most highly, although they too enjoy comedy. Probably, also, the same kinds of ideas are derived from films. A few sample studies are summarized below.

When two thousand English adolescents thirteen to sixteen years of age were asked in 1949 to answer questions concerning the films they had seen during the previous week they showed preferences both as to the type of film and as to the outstanding characteristics they liked.¹¹ Boys as usual preferred films dealing with war, drama, and adventure stories, while girls liked drama, stories of home life, and comedy, and rated adventure films very low. The boys rated love stories and fantasies so low that these were not included among their first ten choices. When the results were tabulated by school grade, there were changes during the four years of secondary school, interest in westerns, gangster stories, and mysteries declined, while that in musical comedies rose somewhat for both sexes. The characteristics that appealed to adolescents were excitement, realism, and humor for members of both sexes, violence for the boys and both "star appeal" and senti-

⁸ J. R. McGeehan and R. L. Maranville, "Television: Impact and Reaction in Lexington, Kentucky," *University of Kentucky Bulletin*, 1953.

⁹ U. H. Fleege, *Self-Revelation of the Adolescent Boy*, Bruce Publishing Company, 1944, 384 pp.

¹⁰ R. Fendler and R. Leicht, "Community Behavior Changes with Maturity," in M. S. Allwood (ed.), *Studies in Mass Communication*, Hobart and William Smith Colleges, 1950–1951, pp. 60–61.

¹¹ W. D. Wall and E. M. Smith, "Film Choices of Adolescents," and "Effects of Cinema Attendance on the Behavior of Adolescents as Seen by Their Contemporaries," *British Journal of Educational Psychology*, 19: 121–136 and 53–61, 1949.

ment for the girls. In fact, girls seemed to choose their films more for the star than for the plot. The effects of the movies, as seen by age-mates, were principally in the imitation of superficial matters: ways of doing the hair, of walking, of talking, or of using make-up.

One investigator studied the 10 per cent of junior high school children who attended the movies most frequently and the 10 per cent who went least.¹² There were few differences between the two extremes, and those that existed were mostly in favor of the movie-goers. As a group they were older, did better schoolwork, were more intelligent, and showed no larger proportion of maladjustment than those who went to the movies least. The one point against the former group was that they owned, and presumably read, fewer books. These results suggest that the movie-goers went because they had the time to do so, they did not take time that should have been spent in studying. Their failure to read may have been a contributing cause of their movie attendance rather than a result of it; that is, since they did not spend hours in voluntary reading, they had enough time to go often to the movies. The two facts are doubtless related, but one cannot be sure in precisely what manner. It is quite possible that the particular children would not read a great deal in any case and that, if they did not have movies to look at, they would spend their leisure in less desirable activities.

Recent literature has centered upon finding explanations for the universal appeal of the motion picture rather than upon statistics of attendance or other objective matters. The most widely held opinions would suggest the following explanations: that the movies reflect the interests, needs, and anxieties of the audience, that they present an intelligible interpretation of life, culled from the chaos of daily existence, that they express the unconscious tendencies of all people and therefore serve as outlets for urges that would otherwise be suppressed and might develop into neuroses or psychoses, that they furnish heroes and heroines, with whom members of the audience can identify themselves, and that they provide an escape into fantasy. Many of these explanations are of a psychoanalytic nature. However, many films of the last decade have dealt specifically with subject matter that can best be understood in psychoanalytic terms. Especially noteworthy have been the films dealing with insanity and with racial prejudice.

Several investigations of the effect of a single motion picture upon attitudes have been made at one time or another, beginning three decades ago with the measurement of anti-Negro prejudice before and after seeing "The Birth of a Nation." Two more recent studies give further evidence of modification of attitudes after seeing a single picture. In one instance, an experimental group of 50 non-Jewish, white college students and a control group

¹² F. Heisler, "Comparison of the Movie and Non-Movie Goers of the Elementary School," *Journal of Educational Research*, 41: 541-546, 1948, and 42: 182-190, 1948.

of 90 students rated their feelings toward Jews on an attitude scale¹³ The members of the experimental group then saw the film, "Gentleman's Agreement" On the following day and again three days later, the 140 students repeated the test The results appear in Table 8 The experimental group

Table 8. INFLUENCE OF A SINGLE MOTION PICTURE
(Average scores)

	Groups	
	Experimental	Control
Before seeing picture	23 55	26 54
Day after seeing picture	16 97	29 27
Three days later	16 40	27 06
Total gain or loss	-7 15	+0 52

Based on I. C. Rosen, "Effect of the Motion Picture 'Gentleman's Agreement' on Attitudes toward Jews," *Journal of Psychology*, 26 525-536, 1948

showed a somewhat more favorable attitude toward Jews than the control group even before seeing the picture—in the test used, the lower the score, the less the prejudice There was a marked lessening of prejudice after seeing the picture, and the new attitudes persisted and even improved a bit three days later The scores of the control group went up and then came down, presumably reflecting the normal degree of variation inherent in the test

A second study measured the effect of "Tomorrow the World"—the story of a Nazi youth (Emil) in America—upon such attitudes as the treatment of Jews, value of "youth" organizations, use of fear and force as bases of discipline, free expression of opinion in newspapers, radio, or books, treatment of a conquered enemy, and so on¹⁴ About fifteen hundred pupils in grades 7 through 12 took part in the experiment A few sample results appear below

The largest group of pupils recognized the basic problems of adjustment faced by a Nazi boy in America, and recommended severe discipline and re-education as means of solving his problems and improving his adjustment The larger proportion expressing this view tended to be in the upper grades rather than in the lower The next largest group did not see the problems clearly, felt the situation to be without a solution, and simply rejected Emil as an undesirable alien The remaining students recommended kindness and re-education as the means of helping Emil, were quite sure he could become a good American, but did not clearly grasp the basic

¹³ I. C. Rosen, "Effect of the Motion Picture 'Gentleman's Agreement' on Attitudes toward Jews," *Journal of Psychology*, 26 525-536, 1948

¹⁴ M. J. Wiese and S. G. Cole, "A Study of Children's Attitudes and the Influence of a Commercial Motion Picture," *Journal of Psychology*, 21 151-171, 1946

problems. That is, those who best understood the situation favored a firm treatment of Emil, while the advocates of kindness were inadequate in their thinking. The investigators purposely selected some schools enrolling children who belonged to minority groups—Jews, Mexicans, or Negroes—or to groups with points of view different from those of the general population—Mormon children and adolescents, for example. In general, the Jewish and Negro pupils showed greater condemnation and less mercy than others of the same age, while the Mormons tended to a greater degree of kindness and sympathy. As a result of seeing the film, the pupils in general showed an increased faith in American ideals—even though members of minorities were aware that these ideals are not always carried into practice—an increased condemnation for the use of force or fear, a greater sympathy toward the Jews, and a stronger tendency toward a merciful treatment of enemies.

It remains to say a few words about the discriminatory effect of all mass media upon children, adolescents, or adults. Each person sees in a film or a production of any kind what he is looking for. A boy with his mind on dates sees ways of love-making, a girl with her mind on clothes sees fashions, a youthful delinquent sees methods of prying open a locked window, a puzzled mother sees a way of influencing her recalcitrant daughter, a grown man catches a reminiscent whiff of his boyhood—and all from the same picture, television presentation, or radio program. Each person sees selectively. One cannot therefore rate any method of mass communication as either bad or good. Whatever moral value is derived from them is put there by the observer rather than by the maker.

Interest in Collecting

The modern boy and girl make collections, but not to the extent that former generations did. The writers have an idea, not vouched for by anyone else, that the efficiency engineer has so eliminated the "wasted" space in the modern house, and has so compressed the "functional" space, that there is no room for a small child to put a collection. For instance, a brother of one of the writers gathered together perhaps a quarter of a ton of rocks, which were labeled and displayed on long shelves in his attic room, the walls of which he had decorated with a collection of wild-life scenes, perhaps a hundred of them tacked up, edge to edge. There was still plenty of room left for the necessary furniture, clothes, books, albums, skates, tennis rackets, and other impedimenta. But where in the small apartment of recent times—or even in the small home, for that matter—could a child store a collection of rocks, or of anything bigger than a postage stamp? Every inch was "planned," and rarely was there a space for the storage of children's "junk." At present, the trend is somewhat in the opposite direc-

tion, and architects are leaving what is known as "specialized living space," which can be used for anything, including storage. Modern youngsters collect such things as model airplanes, phonograph records, or miniature figures, but the expense prohibits large collections. Children still try to collect things that are within their financial resources—picture post cards, snapshots, coupons, stamps, and the like, but their efforts are somewhat hampered.

To study the impulse to collect and to trace its development and expression, one has to go back about two decades in order to find relevant investigations. The things collected vary not only with age and sex, but also with the times, the environment, and the opportunities for storage. A group of 808 boys between the ages of nine and sixteen reported a total of 5,685 collections, or 7 per boy, 868 girls of the same age reported 7,161 collections or 8.2 per girl.¹⁵ The percentage of children at each age who made collections varied from nearly 90 per cent at age 9 to 60 per cent at age 16. The number of collections per age began with 1 for most six-year-olds, increased to 2 at seven years, and to 4 or 5 by eight. Between nine and thirteen the number of collections rose to some figure between 8 and 10, these are the ages when the collecting mania is normally in full force. At fifteen and sixteen the boys had from 4 to 5 and the girls from 4 to 6 collections, and at seventeen and eighteen about 4. At all ages girls made more collections than boys. Rural children far exceeded urban children in collecting, although in adolescence the difference was not marked.

The things that are collected at different age levels are more interesting than the mere numbers. In general, boys collect stamps, coupons, and small figures of animals. As they grow older, they collect less and less. There is, of course, an occasional exception to this statement, and if a man is a collector, he is likely to be intense about it. But the usual effect of age upon the male psyche is to stop collections altogether rather than to change their nature. Girls collect coupons, picture postals, and snapshots, as they grow older, they collect dance programs, letters, theater programs, photographs, and all small accessories—such as handbags, earrings, lipsticks, scarves, and so on. In fact, many women remain inveterate collectors most of their lives. During childhood the things collected are valued primarily for their own sake, in adolescence, the collections are likely to have a sentimental value, in adulthood, the main motive is the acquisition of greater prestige or the profitable use of leisure time. Phonograph records would probably be collected at all ages if it were not for the expense involved.

¹⁵ P. A. Witty and H. C. Lehman, "Further Studies of Children's Interests in Collecting," *Journal of Educational Psychology*, 21 112-117, 1930, and "Collecting Interests of Town and Country Children," *Journal of Educational Psychology*, 24 170-184, 1933, and W. N. Durost, *Children's Collecting Activities in Relation to Social Factors*, Bureau of Publications, Teachers College, Columbia University, 1932, 115 pp.

Interest in Play

Even maiden aunts and bachelor uncles know that children play different games at different ages. They give the little boy a rubber ball for Christmas, the older boy a baseball bat, the early adolescent a tennis racket, and the older adolescent a deck of cards. Their nieces are favored successively with rag dolls, roller skates, skis, and a book of crossword puzzles. Such normal developments with age have been traced in detail by a number of investigators. Typical activities, listed by growth period on the basis of one such reference, are shown in Table 9 (page 198). The needs that are satisfied through play vary from one age level to another. Even when the same sports persist, the reasons for indulging in them are not the same at successive ages. A girl of eight skates because of the pleasure in bodily movement, at ten she likes to race against other skaters, at thirteen she plays ice hockey and belongs to a girls' skating club, at fifteen, she does figure skating—to show off before boys, at eighteen, she skates largely because boys do and because the sport offers one more chance to attract them. Thus, a single sport may be popular for many years but for vastly different reasons.

Figure 79 shows one characteristic game or diversion for boys and for girls at ages 3, 5, 9, 12, 15, 17, and 19. It is clear at once that there are marked changes. The three-year-old plays mostly alone and amuses himself with simple objects. The five-year-old plays in groups of two or three and runs about in active but unorganized games. The older boy plays marbles or flies a kite. There are also a number of popular group games that are usually called by the same names as those of the later years, but they are not played in the same way. For instance, what a small boy calls "baseball" is usually a game played by perhaps four boys against five others. His form of football involves an indeterminate number of urchins, after they have chosen sides, everyone runs and jumps on everyone else, without much regard to teamwork or to the progress of the game. By the time a boy is twelve years old he prefers hiking, camping, skating, and swimming. In early and middle adolescence, the favorite activities are highly organized group games, played with established rules. In late adolescence interest in games has become more passive than active, already the average boy has begun to develop the attitude of the average man, who derives pleasure from watching sports rather than from participating actively in them.

Among girls there are parallel developments. The little girl begins, as her brother does, by playing alone at such simple amusements as banging a pan with a spoon. By five, however, differences in interest between the sexes have begun to show. The five-year-old plays with her doll and also likes such group games as London Bridge, farmer in the dell, or drop the

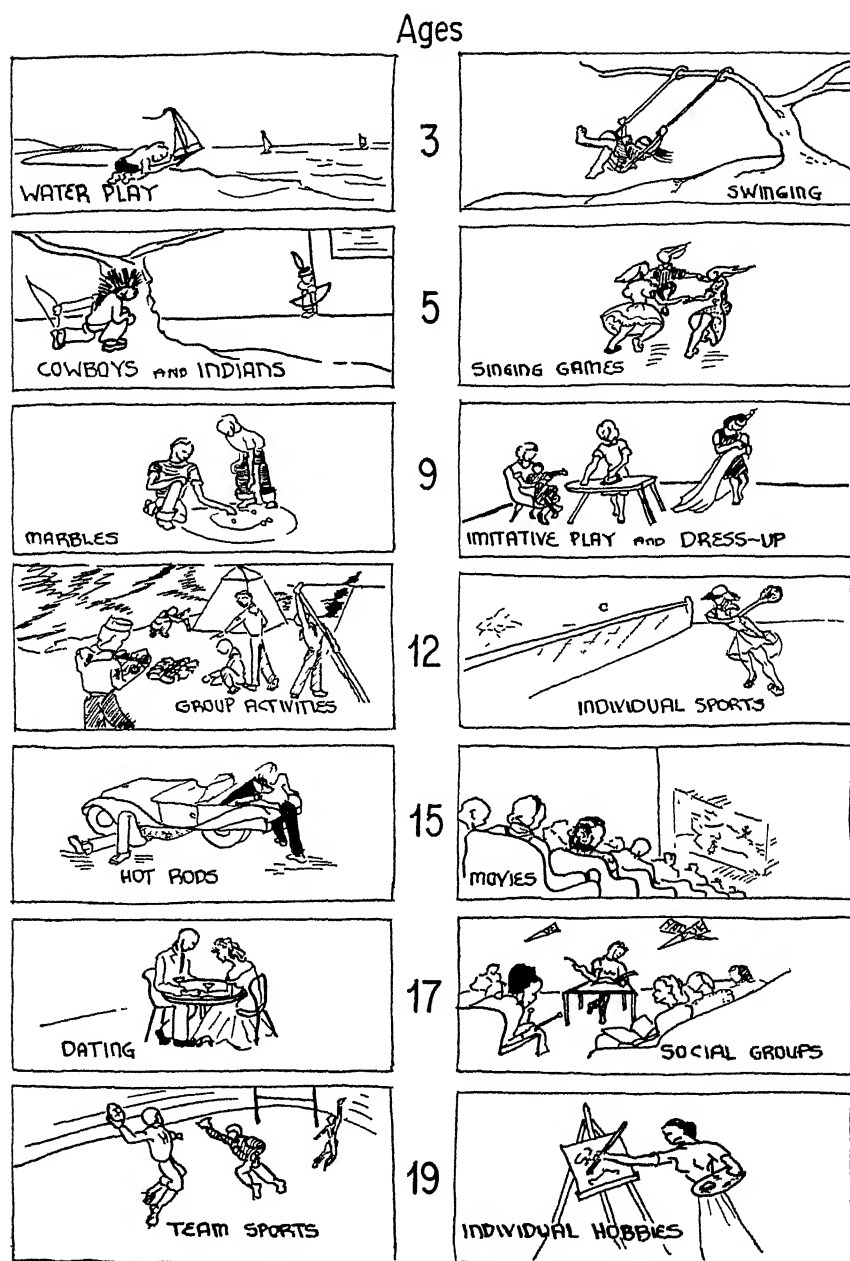


Fig 79 Typical Play Activities at Different Ages

handkerchief The nine-year-old likes to serve "afternoon tea," or to "dress up", she also plays many active games such as run sheep run, or hare and hounds At twelve her amusements are more like a boy's than they were earlier Swimming, roller skating, and hiking are especially popular So also is reading By the age of fifteen practically all athletics are popular, and the average girl is more active in her amusements than she ever is again Movies, dances, and parties vie with athletics, however, and are equally popular The seventeen-year-old is strongly social in her interests—dates, parties, and dances engage most of her attention She still likes sports—swimming or skating, for example—but organized games do not interest her much any longer She reads, sews, looks in the shop windows, and talks interminably over the telephone At twenty-one she is even less active, although she develops some degree of spectator interest in active games, but her real diversions are social gatherings of various kinds, reading, and above all the movies, radio, and television

The transition from childish to adolescent interests in recreation takes place sometime between grade 6 and grade 10, with the girls leading the way. Since the process is gradual, teachers in the later junior high school and early high school grades find a mixture of attitudes and interests among their pupils During the years the change in attitude from the absorption in violent physical activity that characterizes late childhood to the aversion for it that characterizes adulthood begins to take place

In a ninth-grade gymnasium class for boys one finds the following types *first*, the boys who still retain the enthusiasm of the twelve-year-old for team games but with the handicap of physique which keeps them from being able to compete for the school team, *second*, the boys whose interest in sports have become that of adult spectators as far as team games are concerned but who have an active interest in such sports as swimming, golf, tennis, or badminton, which they enjoy playing with either sex, *third*, the boys whose major interest is in participating in competitive school sports and whose ability enables them to do so, *fourth*, the boys who have never developed sufficient skill to take their places comfortably in any game and are always among the last to be chosen on teams, *fifth*, the boys who were not quite good enough for the school teams but who enjoy competitive games with others of like ability

Among the girls who are enrolled in a ninth-grade gymnasium class one finds other types *first*, those who complain of fatigue or pain whenever they are expected to take part in any physical activity except dancing, *second*, those who dislike team games but who enjoy learning individual games which could be played with either sex, *third*, those who have been so unsuccessful in team games that they had developed a resistance to learning any sport in which their prowess might be compared with that of others, *fourth*, those who are almost like boys in their skill in sports, but, in their desire to compete with the more feminine girls for dates, have denied their interest in games and concealed their abilities in this respect, *fifth*, those who are skilled and have retreated from competition for the interest of boys into a major

Table 9 PLAY ACTIVITIES AT DIFFERENT AGES

<i>Period</i>	<i>Age</i>	<i>School</i>	<i>Activities</i>	<i>Characteristics</i>
1 Early childhood	3-6	Pre-school	Rolling, kicking, pushing, swinging, running, jumping, playing with blocks, swings, seesaws, slides, digging in sand, wading, many simple imitative plays	Need for action seems to be the main motivation, pleasure in the movement itself, rather than the results
2 Middle childhood (boys), middle and late (girls)	6-11	Elementary	<i>Boys</i> (a) Imitative play—cowboys, Indians, soldiers, cops and robbers, etc., (b) active play wrestling, climbing, riding, bicycling, running, camping, hiking, skating, swimming, (c) group games tag, hiding, marbles <i>Girls</i> (a) Imitative play school, home, or nurse, dressing up like adults, (b) same as for boys except wrestling, (c) same, with the addition of singing games, hopscotch, and jumping rope	Play is highly self-assertive, individualistic rather than social, continual self-testing, motivated by desire for individual prowess and for adventure, play often destructive Play more socialized than among boys, less motivation from rivalry, personal prowess, or adventure, less destructiveness
3 Late childhood and preadolescence (boys), preadolescence and early adolescence (girls)	12-13	Junior high	<i>Boys</i> (a) Games baseball, football, basketball, and other team games, (b) sports skating, swimming, skiing, etc., usually on competitive basis <i>Girls</i> (a) Games same as for boys, (b) sports same but with less interest in competition, (c) parties, dances, etc	Beginning of group spirit in teams and gangs, no interest in girls Group spirit evident but less forceful than among boys
4 Early adolescence (boys), middle adolescence (girls)	14-18	High school	<i>Boys</i> (a) Team games almost exclusively, except among boys too small for competition, (b) some interest in social activities <i>Girls</i> (a) Games played less and less, but interest in sports continued, (b) main activities are dancing, having dates, making or remaking clothes, going to parties, personal grooming, (c) reading, especially of love stories	Dominance of group over individual Girls acquire passive role as regards sports, their "adventures" are almost all social, strong motive to advance themselves to a higher status, emotional demands satisfied to some extent by reading and attending movies
5 Late adolescence	19-21	College	<i>Boys</i> (a) Games less participation in contact or vigorous games, substitution of golf or tennis for more strenuous sports, much spectator interest, (b) social activities parties, dates, etc <i>Girls</i> (a) Some spectator interest in sports but little participation, (b) continued social activity, (c) reading and going to movies	Lessening of competitive spirit and more playing just for fun, first real appreciation of social values Motivation toward relaxation and diversion, essentially no competition

Based upon E D Mitchell and B S Mason, *The Theory of Play*, A S Barnes & Company, rev ed, 1948, 542 pp

interest in sports with like-minded girls. Frequently as wide an array of individuals as this is put through the same physical education program in an attempt to "round out" their physical development and without concern for the disastrous effects on their social development.¹⁶

Play is by no means the aimless activity that it sometimes seems to adults. It serves definite purposes, and it has definite motives. It leads to prestige among one's peers, it is a means of social participation—and hence a means of learning elementary social skills, such as taking one's turn; it is a form of creative self-expression; it often leads to future work. Moreover, it provides a child with an outlet for his emotions and tensions, it gives him exercise, and it may serve as an escape from boredom. In the teen-ages play takes on a social value that is of great help to boys and girls. The hours spent in dancing, skating, or playing tennis with members of the opposite sex give an adolescent experience and background in intersex relationships. From both a physical and a social point of view, play is of vital importance to children and adolescents. Table 9 provides a good summary of the nature of play at different age levels and of its values and motivations.

The games children play and the intensity of their interest in games or exercise are thus indicative of their developmental age. It will be noted that girls mature earlier than boys in that their social interests appear sooner and their concentration upon organized group games disappears earlier. There is more or less overlapping in interests at all ages, and the fundamental drives are much the same for both sexes, but the forms of expression are somewhat different, partly at least because of environmental pressures. Thus boys are given carpentry sets and encouraged to build things, while a girl has to beg, borrow, or steal a hammer and saw if she wants to use them. On the other hand, girls are given dishes to play house with, any boy who uses them is likely to be called a sissy. The interests are not therefore purely spontaneous but are conditioned by social attitudes transmitted to children from previous generations.

Play among boys at least has a definite relation to size, health, and strength. An investigator who selected the highest and the lowest 10 per cent in strength and physical fitness among a group of young adolescent boys found that the high group greatly exceeded the low in all forms of active games, in their spectator interest, and in their social activities.¹⁷ The 10 per cent with the lowest vitality exceeded the high group in reading and in making things—activities that demand relatively less strength and effort. There is no information as to whether the members of this latter group preferred such activities or indulged in them only because they were barred from successful competition with more vigorous age-mates.

¹⁶ L. H. Meek, *The Personal-Social Development of Boys and Girls*, Progressive Education Association, 1940, pp. 56-57. Used by permission of the Association.

¹⁷ D. B. Van Dalen, "Differential Analysis of the Play of Adolescent Boys," *Journal of Educational Research*, 41: 204-213, 1947.

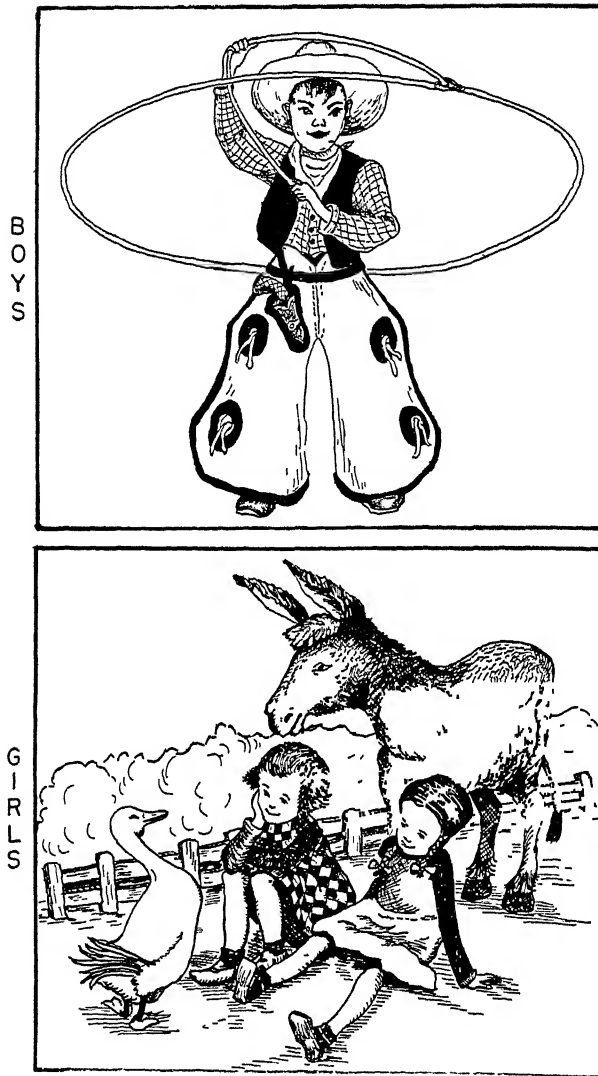


Fig 80 *Reading Interests in Childhood*

Interest in Reading

It would be possible to list the books that were found most interesting last year to boys and girls of different ages, but because the turnover in new books is so rapid, the lists would be of little value by the time this book was printed. Except for a few old favorites, like *Little Women* and *Treasure Island*, most of the titles on a current list would be unfamiliar to

the average student reading this book, since his or her earlier favorites are already supplanted. It seems best, therefore, to limit the present discussion

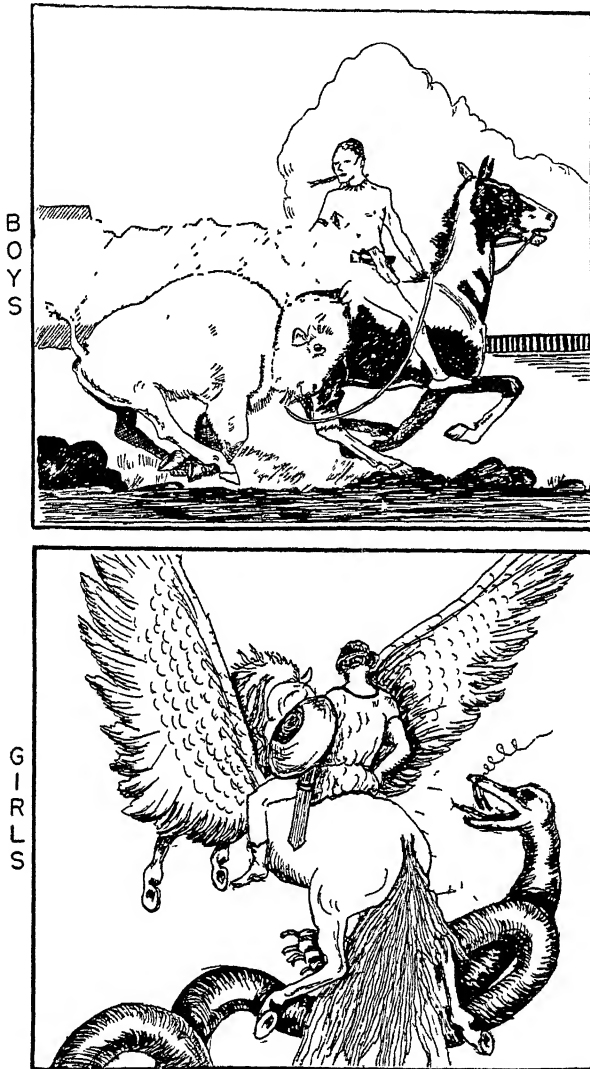


Fig 81 *Reading Interests in Preadolescence*

to types of books rather than to give specific titles. The types that appeal at different age levels are indicated by the sketches in Figures 80 through 84 on pages 200-204, which show book jackets of books for boys and girls from

late childhood through late adolescence. Since the jacket of a book is supposed to indicate its nature, a series of jackets reflects interests at various ages

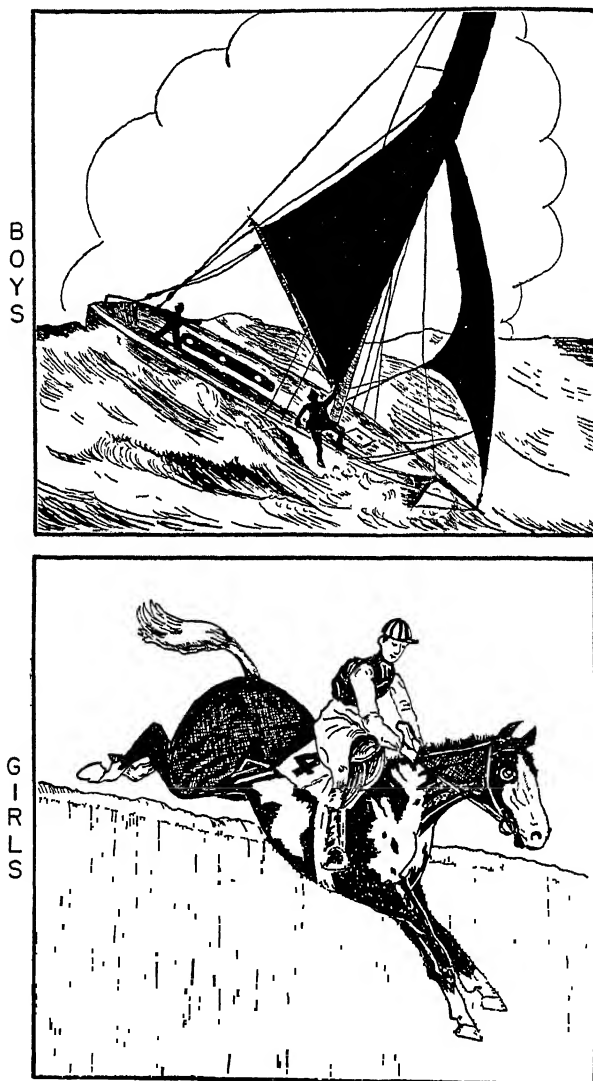


Fig 82: *Reading Interests in Early Adolescence*

The child of either sex who can just barely read likes a small-sized book with many pictures and a simple plot about animals or other children. Little girls like fairy stories better than small boys do, but it is not till

middle childhood that the main sex differences appear. At the elementary school level most boys like stories that deal with war, Boy Scouts, athletics,



Fig 83. *Reading Interests in Middle Adolescence*

or strenuous adventure. In the preadolescent years many boys develop a craze for reading an entire series of books. The themes center mainly upon adventures and athletics. The plot is rather stereotyped, for instance,

the poor but honest boy meets undeserved failure but triumphs in the end over his wicked enemies. The characters are also types rather than indi-

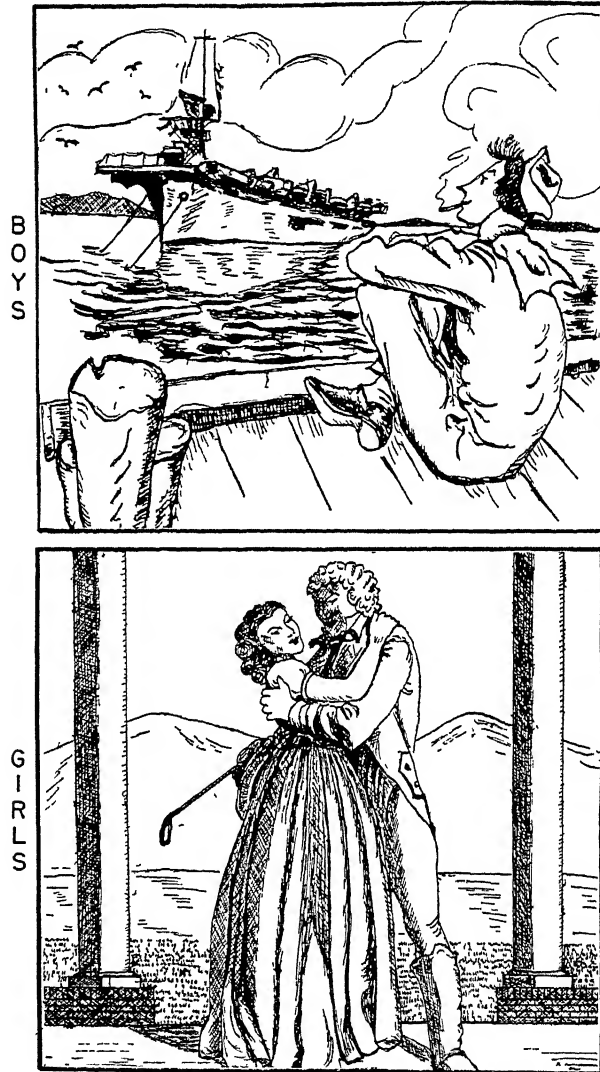


Fig 84. *Reading Interests in Late Adolescence*

viduals It is not until the later years of adolescence that romantic novels make an appeal to the average boy, and some boys never care for them Girls show a somewhat different development During elementary school

their interest is chiefly in fairy stories and tales of home or school life. They also read entire sets of books about the same main character. There is a short period during preadolescence when they like adventure stories, preferably of a romantic nature. With the beginning of adolescence, they become almost immediately interested in romantic literature, most girls of thirteen are already reading love stories. They also show great devotion to the continued story in popular magazines and a more pronounced liking than boys have for detective stories, and they read more accounts of travel. Once the liking for adult fiction is established, it pushes out the juvenile forms.

The figures from one typical investigation¹⁸ of the reading interests of 14,324 pupils in grades 7 through 12 are summarized in Table 10. The results are based upon the withdrawal of books from the school library and

Table 10. TYPES OF BOOKS WITHDRAWN FROM LIBRARIES BY ADOLESCENTS
(Figures are in per cents, which total 100 for each grade)

Boys and Grade						Types of book	Girls and Grade					
7	8	9	10	11	12		7	8	9	10	11	12
29	33	29	28	20	17	1 Adventure	12	10	11	8	6	4
23	20	24	25	34	36	2 Romances	47	51	53	54	58	57
14	13	13	10	5	3	3 Animal stories	11	9	6	4	2	2
6	6	8	8	9	7	4 Biographies	5	5	7	7	9	6
6	8	8	7	5	5	5 Sports	1	1	1	1	1	1
5	6	7	6	5	7	6 War stories	1	1	1	2	1	2
8	6	4	4	3	2	7 Detective stories	11	7	6	4	1	1
2	2	2	2	3	3	8 Science	1	2	1	2	1	1
1	1		2	5	7	9 Arts	1	1	1	3	7	12
1	1	1	1	2	2	10 History	1	1	1	1	2	1
1	1					11 Mythology (fairy tales)	1	1		1		1
	1	1	1	2	1	12 Humorous stories	1		1	1	1	1
		1	1	1	1	13 Occupations				1	1	1
4	2	2	5	6	9	14 Miscellaneous	2	3	4	6	7	8
						15 Career stories (about women)	5	8	7	5	3	2
Average per year 8 7 books						Average per year 10 5 books						

From P. S. McCarty, "Reading Interests as Shown by Choices of Books in School Libraries," *School Review*, 58 93-94, 1950. Used by permission of The University of Chicago Press.

therefore do not show all the reading the pupils did, but presumably they do show a fair cross section. Boys concentrated upon stories of adventure, romances, and tales of animals—in the earlier grades—while girls put romance first, with adventure stories, mysteries, and animal tales considerably lower. For both sexes interest in adventure and animal stories decreased with age, while that in romances increased. Boys tended to spread their interests over more kinds of reading than did girls, who concentrated upon romance.

¹⁸ P. S. McCarty, "Reading Interests as Shown by Choices of Books in School Libraries," *School Review*, 58 90-96, 1950.

Another investigator found that adventure stories which told of physical hardships and dangers were far more popular among boys than among girls, while those that did not stress the physically grim showed much less difference in appeal to the sexes.¹⁹ That is, girls did not object to adventure per se, but they preferred to be spared the details of suffering. Boys showed a differential interest also in stories about wild animals and sports of all kinds. Girls had an excessive liking for biographies of women, mysteries, stories of home life, love stories, and tales that were sentimental though not involving a love theme. They liked essays better than boys did but readings in science less. In all studies girls read more than boys did. At all ages, for both sexes, fiction was from two to three times as popular as nonfiction.²⁰

Reading has great value for adolescents because of its possible contribution to their development. It can provide relief from tension, opportunity for working out aggressive drives harmlessly, information for the resolution of conflicts and characters for easy identification.²¹ Reading can also result in security and self-realization for an adolescent's inner life, better interpersonal relations with his family and peers, changes in behavior, new ideas, and increased appreciation of many life activities.²² The crucial problem would seem to lie in getting the right books to the right adolescents. The values of reading are there, but boys and girls need help in finding them. In recent years, books have been used as a constructive form of treatment with delinquents because of their value in providing new identifications, new ideologies, new satisfactions, and new patterns of living.²³

According to one report,²⁴ college students spend from two to eight hours a week upon free reading of their own choice. Seniors reported less such reading than freshmen. There were great differences from one college to another, though no explanation was given for this phenomenon. There did not seem to be any recognizable trends in the type of book read. The selections covered an extremely wide range, however.

Most adolescent boys read magazines that deal with mechanics, sports, athletics, and G men, while girls of the same age tend to concentrate upon magazines that contain "true life" stories, material about women's arts, stories of movie stars, and adult fiction of a sentimental character. During high school, boys and girls read an average of four magazines regularly,

¹⁹ G. W. Norvell, *Reading Interests of Young People*, D. C. Heath & Company, 1950, pp. 52, 56-57.

²⁰ McCarty, "Reading Interests as Shown by Choices of Books in School Libraries," *loc. cit.*

²¹ B. Berelson, "Communication and Youth," in F. Henne, A. Brooks, and R. Ersted, *Youth, Communication, and Libraries*, American Library Association, 1949, pp. 14-30.

²² A. R. Brooks, "Developmental Value of Books," *ibid.*, pp. 49-61.

²³ J. Paulson, "Psychotherapeutic Value of Books in Treatment and Prevention of Delinquency," *American Journal of Psychotherapy*, 1:71-86, 1947.

²⁴ W. Abraham, "The Reading Choices of College Students," *Journal of Educational Research*, 45:459-465, 1952.

three others often, and another six sometimes. At all ages the girls incline more than boys to love stories, while the boys read more than do girls about current events. The most widely read magazines are *Life*, *Reader's Digest*, *Time*, *Newsweek*, *Look*, and *Saturday Evening Post*. Since high school girls are far more avid readers than boys of the same age, the fiction magazines that rate high in frequency have a mainly feminine appeal: *Cosmopolitan*, *Good Housekeeping*, and the like. Most girls read *Seventeen*, *Glamour*, or *Chic*. As adolescents grow older many of them pass through a stage of reading pulps. Science fiction rates high among the boys and detective stories among the girls, although some girls read the former and some boys the latter. In one study of eleventh-grade students, the girls read a total of thirty-seven different magazines and the boys a total of thirty-one.²⁵

At all ages the children of the millionaire, the university professor, the merchant, the butcher, the bricklayer, the teamster, the miner, and the day laborer read the comics. Every time one goes to the corner drugstore at least one small urchin may be seen sitting on the floor in front of the magazine rack completely absorbed in *Superman* or *Crime Does Not Pay*. Disapproval of parents and teachers has had practically no effect upon this type of reading. Books of comics are favorites among children, even among those who also read good literature. The popularity of this type of reading matter may be inferred from Table 11. Comics are at all ages a little more

Table 11 PER CENTS OF INDIVIDUALS READING COMICS AT DIFFERENT AGES

	6-11	12-17	18-30	30
Boys	95	87	41	16
Girls	91	81	28	12

Based on O. A. Witty and R. A. Sizemore, "Reading the Comics: A Summary of Studies and an Evaluation I," *Elementary English Journal*, 31:501-506, 1954.

popular among boys and men than among girls and women. It is curious that so much interest persists into the adult years. Among children such reading is virtually universal and among adolescents it is extremely popular. The IQ of students in grades 11 and 12 who read books of comics was found in one study to be 94 and 88, respectively, as compared with an average of 108 and 110 for all students in these grades.²⁶ This fact suggests that a continuation of real devotion to comics is a reflection of intellectual immaturity. Among adults such reading probably serves partly as an easily available form of "escape" reading and partly as a source of mere amuse-

²⁵ A. Shatter, "Survey of Student Reading," *English Journal*, 40:271-273, 1951.

²⁶ L. Bender and R. Lowrie, "The Effect of Comic Books on the Ideology of Children," *American Journal of Orthopsychiatry*, 11:540-550, 1941.

ment, in much the same class as the typical western film, which adults often enjoy because they derive amusement from it

It does not seem to be especially useful to give the names of comic books which are particularly popular at the moment, since others will soon take their place, but in order to observe the developmental trends it is instructive

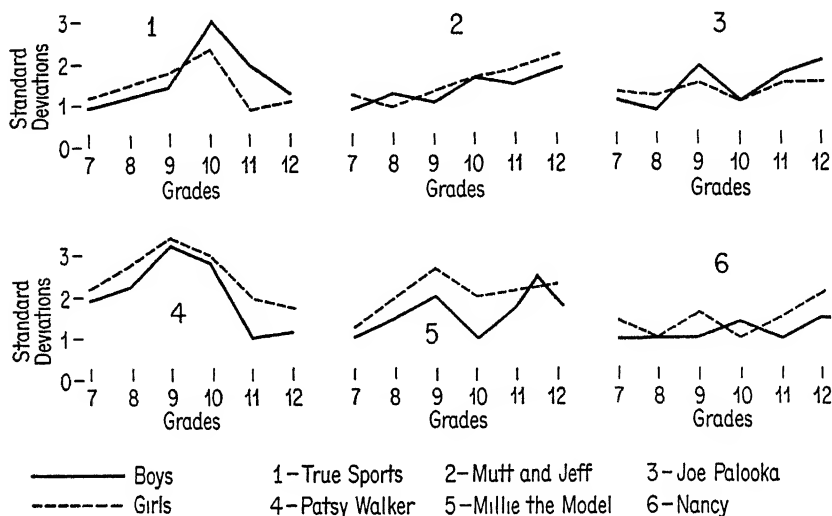


Fig 85 *Reading of Comics*

Based on R. F. Butterworth and G. G. Thompson, "Factors Related to Age Grade Trend and Sex Differences in Children's Preferences for Comic Books," *Journal of General Psychology*, 78: 71-96, 1951

to trace the measure of interest in various comic books that have been popular. One investigation in 1951 gives graphs of the preferences of 510 boys and 572 girls, some rural and some urban, in grades 7 through 12. A few sample results appear in Figure 85. "True Sports" shows a relatively low level of interest in grades 7, 8, and 9, then a marked increase for a year or two, followed by a decline. "Mutt and Jeff" and "Joe Palooka" showed a fairly steady increase from beginning to end. Among the comic books popular with the girls, "Patsy Walker" showed an outline of much the same type as "True Sports" for the boys. "Millie the Model" was irregular, and "Nancy" showed a slight tendency to increase. In general, the rural children showed a higher degree of liking for comic books than urban children, except for comics that center about sports.

The comics make their appeal to several known interests of children and adolescents. For boys, the books provide adventure, usually with violence. They set up successful hero figures, they exploit the ever-popular theme of the poor or misunderstood boy who makes good—especially in

sports—and they provide humor at a level that is understandable. For girls, they give many helpful hints upon how to be feminine and popular, they show successful romance and dating, they provide some humor but usually not as an end in itself, and they center around adolescent characters. They probably also act as a vicarious means of wish-fulfillment.²⁷ To a considerable extent each child finds in the comic books what he is looking for—just as he does in the movies. If he is already aggressive and rebellious, the books are likely to increase these tendencies, but the well-adjusted child does not seem to be greatly affected. For all children the books may act as means of working off aggressions at the level of fantasy. Comics certainly have some features that are bad, but perhaps not so much on moral as on literary grounds. They are unrefined and full of bad English—one of the writers found “irregardless” twice in one book, the characters are often bad-mannered and coarse. They sometimes depict types of violence that the movies’ own moral code would exclude. The cruelty often makes an adult shudder, but aside from its unrefined setting, it is no worse than the cruelty described in horrendous detail in *Quo Vadis*? It is not desirable that children read *Quo Vadis*? either, because they become upset and frightened. The comics merely portray the same type of scenes and in infinitely worse style.

All the early investigations of the comics were as one in condemning them, on the grounds that they frightened children and upset their metabolism.²⁸ Also, there have been a few tragedies because children patterned their imitative play after the models they found in the comic books. More recent investigations do not go quite so far in condemnation. One investigator even found no effect at all upon either schoolwork or personality. Possibly the efforts of the publishers to make the books less offensive in taste are having results.²⁹

The comics seem to be here to stay, at least for the foreseeable future. They do have some virtues, aside from their almost universal appeal. They have a simple vocabulary, for instance. Each book contains about 10,000 words, of which 9,000 are among the commonest in the language. There is some slang, but such words do not exceed 5 per cent of the total.³⁰ They are often read by children who would otherwise do no out-of-school reading at all. Since the cartoon form cannot be eliminated, perhaps it can

²⁷ F. C. Kinneman, “The Comics and Their Appeal to Youth of Today,” *English Journal*, 32 331–335, 1943, and L. Bender, “The Psychology of Children’s Reading and the Comics,” *Journal of Educational Sociology*, 18 223–231, 1944.

²⁸ See F. Wertham, “The Comics—Very Funny,” *Saturday Review of Literature*, May 29, 1948, G. L. McIntyre, “Not So Funny Funnies,” *Progressive Education*, 22 28–30, 1945, and Frank, “Comics, Radio, Movies, and Children,” *loc cit*.

²⁹ F. Wertham, “Are They Cleaning Up the Comics?” *New York State Education*, 43 176–180, 1955.

³⁰ See G. E. Hill, “The Vocabulary of Comic Strips,” *Journal of Educational Psychology*, 34 77–87, 1943.

be used more constructively than it is—as has been done in a series that depicts stories from the Bible. With better drawing and better stories, and with the elimination of the cruelty, bad manners, slang phrases, and coarseness, the comic book may take its place as a positive contribution to children's literature.

A fairly recent report gives figures for the reading of comics as well as magazines by age from fifteen through twenty-five. In this report, the reading of comics was not mentioned by those over twenty years of age, and only briefly at earlier ages.

Table 12 READING OF COMICS AND MAGAZINES

<i>Ages</i>	<i>Number of Comics per Person</i>	<i>Number of Magazines Read</i>	<i>Minutes Spent Each Week in Reading</i>
15	0.8	5.8	137
16	2.3	8.0	136
17	0.7	7.7	114
18	0.3	9.7	127
19	0.1	8.2	72
20	0.3	11.3	76
21		18.7	95
22		12.4	89
23		13.2	110
24		16.0	115
25		22.5	120

The number of magazines must include those merely glanced at, since the reading time is hardly sufficient for more than a brief examination. It reflects, however, a wide range of contact with the printed word.

Based on R. Fendler and R. Leicht, "Community Behavior Changes with Maturity," in M. S. Allwood (ed.), *Studies in Mass Communication*, Hobart and William Smith Colleges, 1950-1951, p. 61.

According to all available reports, high school students read newspapers regularly, but not evenly—any more than adults do. They average 1.5 newspapers per day.³¹ The boys read foreign news, local news, the sports page, science news, and the comics. The girls read the social sections and the pages devoted to the "Woman's World"—clothes, cooking, entertaining, and so on. They also read the comics and some local news, but mostly they omit the sports page. Members of both sexes mull over television and radio announcements. During the high school years, many students begin to read the editorials, but the per cent is rarely above 40 and often lower.³² Columnists and book reviews receive even less attention.

³¹ D. G. Burns, "Newspaper Reading in the Secondary Modern School," *British Journal of Psychology*, 25:1-9, 1955.

³² A. S. Patel, "Newspaper Reading Interests of Secondary School Children," *Journal of Educational Psychology*, 11:34-43, 1953.

One American phenomenon is the mushrooming of the sports page in the newspapers. Even as sober a paper as the *New York Times* has increased its sporting news to 7.5 per cent of its total. Most local papers run a great deal higher, usually between 20 and 25 per cent of the space being devoted to sports. This development—from 5 to 15 per cent in 1900—is a reflection of the great spectator interest that the American public of all ages and both sexes have in sports. It is of a piece with the crammed stadiums for football games and the great arenas packed for basketball contests. Adolescents share in this general enthusiasm and are, indeed, among the most ardent readers of the sports pages.³³

There is little doubt that the radio and, more recently, television have reduced the amount of reading done by children and adolescents. Radio listening begins long before children can read, and many of them develop the "radio habit" by the time they are able to read easily and therefore do not read as much outside school as they otherwise might. In any case, if a child listens to the radio or watches television for two or three hours a day, he has no time for reading. In fact, with the aid of the movies, radio, and television, a child *can* almost avoid the printed page altogether, except when he is in school. However, children and adolescents from good homes do still read a good deal and for those who do, there is a large array of beautiful books from which to make a choice.

Summary

Adolescents have a plethora of interests—more than they have time to pursue. In former decades they were influenced mainly by what they read, in books or in newspapers. Then moving pictures became all-powerful. About four decades ago, the radio became a source of ideas and experiences. In the last decade television has been added. Adolescents are thus subject to immense pressures from sources over which the school has no control at all. The teacher of today must at least live with these various forms of stimulation, and if possible she should use them constructively in her teaching. The mass media are here to stay, and they are much too powerful to be ignored. The best that a teacher can hope for is to guide students to the most profitable forms of presentation and to encourage them to bring into the classroom what they learn through these various outside media of communication. This procedure at least gives the teacher a chance to discuss ideas with the pupils and to guide their thinking and reactions.

³³ S. L. Pressey and W. E. Crates, "Sports and the Public Mind," *School and Society*, 72:373-374, 1950.

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11

Intellectual Deviates

One of the most significant outcomes of the testing movement is the objective proof that children differ from each other in almost every intellectual trait. The total range of IQ's thus far determined varies from 20 to 200—that is, from an idiot whose capacity was only 20 per cent of what is normal for his age to a brilliant child with twice the average intellectual endowment. This entire range of IQ's forms an unbroken series from the lowest to the highest, but for purposes of convenience it is generally divided into a number of levels. It is usually assumed that children with an IQ between 90 and 110 are of normal ability for their age, this group makes up about two thirds of the entire population. Those with IQ's from 80 to 90 are classed as dull normal and those from 111 to 130 as bright. The ability of these two groups is slightly below or slightly above the average. Below the dull normal group, with IQ's from 70 to 79, come the borderline defectives. At the two ends of the distribution are the gifted and the true defectives. The bright and dull children learn respectively a little faster or a little more slowly than those in the central group, but both master the material of the elementary school, the former perhaps in a semester less time than the average pupil and the latter in somewhat more time than the normal child. That is, the time has to vary, unless the standard of performance in strictly academic work is lowered. Modern promotion policies tend to advance pupils without respect to their basic achievement, thus varying the accomplishment rather than the time.

The present chapter is concerned only with those at the top or at the bottom of the high school distribution—not with those who are slightly above or below the normal mental development for their age. Both groups have recognizable characteristics, both have special problems, and both require an education that is adjusted to their needs. It is also probable that they should have specially trained and specially selected teachers.

The intellectual deviates in any school population are those who score in the extremes of intelligence *for their group*, not for the entire world. Since the distribution changes as pupils proceed through the grades, the

same children are not deviates at all levels. In high school the pupils in the "brilliant" group have IQ's from about 140 up to 190. At the other end of the distribution, the pupils in the "dull" group have IQ's that range from 95 downward. The differences between these approximate limits and those just given for the general school population are due to the elimination that has taken place during the first eight years of school. Because the lowest IQ's have already been weeded out, the extremes of the remaining distribution fall in a different place. The line of demarcation between these small, extreme groups and the rest of the high school population cannot, of course, be drawn in a hard-and-fast manner, and the limits suggested above are only approximate. The main thing to remember is that even these relative limits shift from one level of education to another, in terms of each fresh distribution.¹

The remaining sections of the chapter will discuss the highest and the lowest groups at the high school level. What is said about them applies in reduced measure to those who are classified as a little above or a little below the average for their grade or age.

The Brilliant Adolescent

Characteristics There are two popular misconceptions about the very bright child: that he is small for his age and that he is queer. Both assumptions are wrong, as will presently be shown. The first probably comes from the fact that gifted children are usually accelerated in school and are therefore in classes with others who are about two years older; they therefore may seem to be small, but this error would be corrected if they were compared with children of their own age. Actually, brilliant children are taller and heavier than normal children of their chronological group; they also mature earlier. The typical situation is shown in Figure 86. These gifted children were taller and heavier than the average, and there was nothing in the least sickly about them. In general, brilliant children and adolescents are as superior physically as they are mentally.²

Superiority in size continues into adult life. In Terman's study of one thousand brilliant boys and girls, whom he had at that time followed for twenty-five years, the men averaged five feet eleven inches as compared with the national average of five feet seven and a half inches and the general average for college men of five feet eight and a half inches.³ Twenty-eight

¹ For instance, the failing graduate student is typically a person who is well above the average of the general population in intelligence, but he is definitely inferior to the highest 5 per cent in verbal intelligence, from whom most graduate students are drawn. There is always a bottom to a distribution, no matter where it is cut off.

² See, for instance, W. B. Barbe, "Characteristics of Gifted Children," *Educational Administration and Supervision*, 41:207-217, 1955.

³ L. M. Terman and M. H. Oden, *The Gifted Child Grows Up*, Stanford University Press, 1947, p. 94.

per cent were six feet tall or over, not even the California sunshine can be held entirely responsible, since it did not shine exclusively upon them. The young women averaged five feet five and a half inches as against parallel averages of five feet three and a half inches and five feet four inches. At the time of the last investigation (1946), when the brilliant children of the 1920's had become men and women over thirty, the robust health they had shown in childhood was still with them, only 2 per cent of the men and 4 per cent of the women reported ill-health, and the death rate among them was ap-

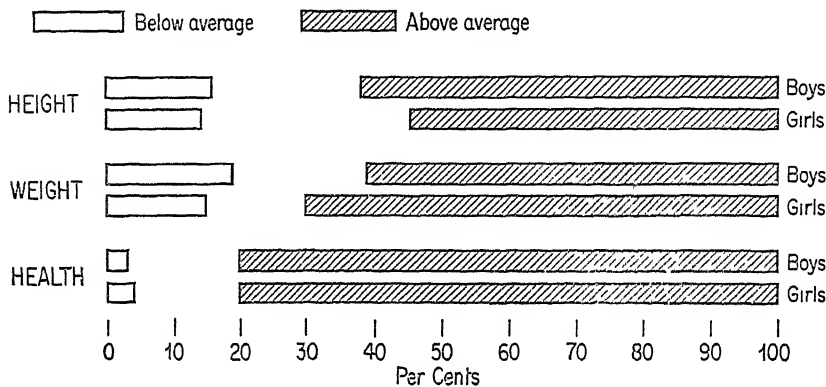


Fig 86 *Physical Growth of Superior Children*

Based on P. A. Witty, "A Genetic Study of Fifty Gifted Children," *Thirty-ninth Yearbook of the National Society for the Study of Education*, 1940, Pt. II, pp. 403-404

proximately one third that of the general population. Evidence from two other sources supports the above facts: the men who made the highest scores on the Army intelligence tests were taller and heavier than those who made low scores,⁴ and winners in a national search for talent were heavier and taller than the average for their ages.⁵

Intellectually, the brilliant pupil stands out clearly and has done so from early childhood. He learns with unusual rapidity and retains what he learns. Usually he concentrates without effort and spontaneously uses economical methods of study. An outstanding mental characteristic is his ability to see relationships, to generalize, to distinguish the essential from the nonessential, and to see through facts to their logical conclusions. For the brilliant pupil ideas have a real fascination. He is vitally interested in both facts and theories. He wants to learn. From his earliest years he shows

⁴ W. D. Altus, "The Height and Weight of Soldiers as Associated with Scores on the Army General Classification Tests," *Journal of Social Psychology*, 29 201-210, 1949.

⁵ H. A. Edgeiton, S. H. Britt, and R. D. Norman, "Physical Differences between Ranking and Nonranking Contestants in the First Annual Science Talent Search," *American Journal of Physical Anthropology*, 5 435-452, 1949.

a liking for playing with ideas and for rearranging them in new combinations. This sort of mental exercise develops by the years of adolescence into real originality and resourcefulness. Indeed, the essence of brilliancy is probably a combination of the ability to make generalizations and this spontaneous originality in handling ideas. The merely bright child with a splendid memory and a quick reaction time has neither of these qualities in larger measure than the average person.

A rather old study seems to the writers to summarize the outstanding intellectual traits of the brilliant student rather better than more modern investigations have done. The superior student shows his superiority especially in the ways listed in Table 13. The merely bright student does not show this complex of traits.

Table 13 TRAITS OF THE INTELLECTUALLY MATURE PERSON

<i>Trait</i>	<i>Number of Times Mentioned</i>
1 Forms rational judgments uncolored by emotional tones	32
2 Can perceive relationships and correlate materials	19
3 Has a critical, evaluating attitude toward problems	19
4 Is independent	16
5 Has a wide background of information	15
6 Shows intellectual initiative	12
7 Is able to apply knowledge	11
8 Keeps an open mind	10
9 Assimilates new facts with the old	9
10 Has a good sense of values	7
11 Can separate the important from the unimportant	7
12 Shows tolerance toward those who differ in their opinions	6

From R. E. Eckert, "Intellectual Maturity," *Journal of Higher Education*, 5:478-484, 1934. Used by permission of the Journal.

From several sources comes information as to the permanence of intellectual superiority. The first line of argument is based upon recorded achievement, which does not seem to fall off with increasing years. Only in lyric poetry does youth seem to have a real advantage. In other fields, the optimum ages seem to be between forty and sixty.⁶

There have been two follow-up studies of Terman's 1,000 gifted children, who are by now between forty and fifty years of age. The first follow-up in 1948 showed that as young adults, twenty years after their original selection, these gifted individuals were still very superior.⁷ Their

⁶ See H. C. Lehman, *Age and Achievement*, Princeton University Press, 1953, 359 pp., also, by the same author, "Optimum Ages for Eminent Leadership," *Scientific Monthly*, 54:163-169 and 171-172, 1942.

⁷ R. L. Thorndike, "An Evaluation of the Adult Intellectual Status of Terman's Gifted Children," *Journal of Genetic Psychology*, 72:17-27, 1948.

median score was at the 96th percentile for the general population, and 90 per cent of them scored above the 75th percentile. All but two out of the 961 tested scored above the median. This group was not quite as superior as it had been in childhood, but it still was far above the average. It is probable that a few of them were wrongly classified in the first place, since no test is infallible, and were merely bright rather than brilliant. It may also be that some of them failed in later years to receive the stimulation they needed in order to make full use of their superior endowment, and here

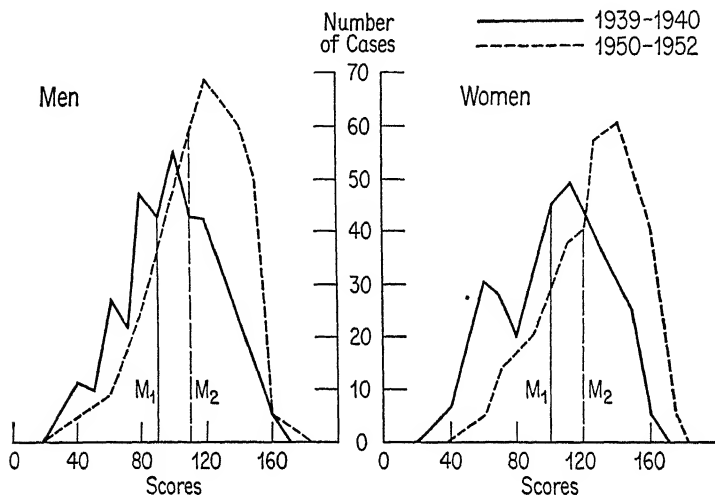


Fig 87 Growth of Adult Intelligence among the Gifted

Based on N. Bayley and M. H. Oden, "The Maintenance of Intellectual Ability in Gifted Adults," *Journal of Gerontology*, 10: 91-107, 1955

and there one had doubtless deteriorated. On the whole, however, they were fulfilling the promise of their childhood.

The second follow-up study used a "concepts" test that is better fitted to measure adult intelligence than the Stanford-Binet. The test was given twice, once in 1939 and once in 1950. Between these two dates these superior adults were still increasing their scores. The results are summarized in Figure 87.

The brilliant student is almost always an academic success, and when he is not, the reasons are personal rather than intellectual. He is commonly accelerated one or two years. His school marks are high, especially in subjects demanding judgment, generalization, and logical thought. If a superior child does not do superior work, there is something radically wrong with either the child or the school. Sometimes the fault lies with the school because the work gives too little opportunity for the exercise of independent

thinking or because the teachers have failed to recognize brilliancy. Some superior students in high school are still unawakened from mere lack of adequate intellectual stimulation. Society cannot possibly afford to let highly endowed students become mediocrities. There are altogether too few superior individuals born, none of them can be wasted.

Socially, the brilliant adolescent is—like everyone else—what his environment has made him. If he has been treated as a prodigy and has been a center of interest, he may have an unpleasant personality. If he has been allowed to concentrate upon academic work to the exclusion of social activities he may be markedly introverted. If he has had excessive parental protection because of his intellectual success, he may be spoiled and babyish. Unless environmental factors have been unfavorable, however, the brilliant adolescent is usually a co-operative and responsible person. He is willing to be guided in his work and personal development. He gets along with others at least as well as the average pupil, and often better. He makes friends easily. His participation in extracurricular affairs is higher than that of his classmates. He has somewhat more chance than others of being a leader among his age-mates. He has more interests, participates in more activities, and has more hobbies than the average pupil. He especially likes activities that demand thinking and collections that require classification. In general, gifted pupils are superior also in character traits, and the more superior they are, the more likely are they to score high on tests of personality.⁸ They are conspicuously more courageous, sympathetic, self-confident, and honest than the average. They show an early development of self-criticism and sense of responsibility, and although they are independent they are also co-operative.

The basic superiority of the gifted pupil is well demonstrated by comparison of children selected by their teachers as being gifted, mentally retarded, or as problems.⁹ The total number of children from whom selection was made was over 45,000, of whom the teachers selected 3,359 (7.4 per cent) as retarded, 2,401 (5.3 per cent) as problems, and 341 (0.76 per cent) as gifted. The remaining 39,000 (approximately) formed the normal group. All the children were given tests of personality and were rated on various traits. It should be noted that, in terms of the normal distribution of ability, the teachers selected three times as many "retarded" children and less than a third as many gifted children as would have been expected. In the former group there must have been many who were "problems" and failed to learn for other reasons than mental inadequacy, or else the curriculum was so difficult and the standards were so high that a disproportionate number

⁸ G. Lightfoot, *Characteristics of Bright and Dull Children*, Bureau of Publications, Teachers College, Columbia University, 1951, 136 pp.

⁹ W. D. Lewis, "Some Characteristics of Children Designated as Mentally Retarded, as Problems, or as Geniuses by Teachers," *Journal of Genetic Psychology*, 70:29-51, 1947.

of pupils were unable to meet the requirements. The children selected as gifted were undoubtedly very superior indeed, but many others with IQ's over 130 must have been regarded as only average. Assuming that the population contained the usual 2.5 per cent of brilliant children, the teachers recognized only one in four of them. The problem children were probably in the main those of the destructive-delinquent type who make trouble, the quiet problems being classed as defectives. Despite the presumed inaccuracies of selection, which are understandable from a teacher's point of view, the comparisons of the groups are of interest, especially as showing the superiority of emotional and social adjustment on the part of the brilliant pupils. A few of the comparisons appear in Table 14, which gives the per

Table 14 CHARACTERISTIC TRAITS OF NORMAL, BRILLIANT, RETARDED, AND PROBLEM CHILDREN

<i>Trait</i>	<i>Sex</i>	<i>Normal Pupils (%)</i>	<i>Brilliant Pupils (%)</i>	<i>Retarded Pupils (%)</i>	<i>Problem Pupils (%)</i>
1 Dependability	Boys	31	61	11	6
	Girls	42	73	16	10
2 Friendliness	Boys	35	47	14	12
	Girls	36	59	12	12
3 Honesty	Boys	33	43	18	11
	Girls	37	51	22	13
4 Originality	Boys	10	46	1	5
	Girls	11	48	1	4
5 Self-reliance	Boys	8	21	1	3
	Girls	10	21	1	2
6 Ambition	Boys	22	66	5	6
	Girls	34	76	5	10
7 Happiness	Boys	38	50	23	17
	Girls	43	54	25	17

Based on W. D. Lewis, "Some Characteristics of Children Designated as Mentally Retarded, as Problems, or as Geniuses by Teachers," *Journal of Genetic Psychology*, 70 29-51, 1947.

cent of each group of pupils showing each character trait. The brilliant pupils were superior in every one. There is no suggestion that these outstandingly able pupils were queer or maladjusted. The dull children scored above the problem pupils in most of the traits reported.

When Terman's gifted children were in elementary and high school, they showed much the same range of social adjustment as other children of

their age, but their average was higher and fewer of them suffered from extreme maladjustment. That is, they were a mentally healthy group when first identified. In 1940, 80 per cent of the young men and 82 per cent of the young women were still in good mental health, while 16 and 14 per cent, respectively, had some slight, but not serious, unsolved problems, and 4 per cent from each sex were seriously maladjusted. In 1947, the parallel figures for this group were 78 and 80 per cent, 17 and 15 per cent, and 5 per cent.¹⁰ The actual numbers of insane people among the living men and women who could be located were 11 in 1940 and 18 in 1945—or 0.8 per cent and 1.3 per cent. The former figure is below the national average for the general population and the latter is just equal to expectation. In other words, insanity is no more common among the brilliant than among the nonbrilliant, and is actually far below the rates for dull people and defectives. Another evidence of their social acceptability is their marriage rate.¹¹ Whereas the general rate for persons of their age in 1946 was 67 per cent for men and 78 for women, the marriage rates for the brilliant students of both sexes were 84 per cent.

Treatment There are basically three adjustments that can be made to the presence of superior pupils in a school population: they can be left where they are and allowed to proceed with their classmates without any change of curriculum, they can be accelerated at the rate of a half grade or a grade each year until they get into a class where the work is a challenge to their minds, or they can be "kept back" with their age-mates and given a greatly enriched curriculum, which may consist either of the same sort of thing studied by the others only more of it, or of new subject matter that they alone pursue. If either the first or the third method is selected, the brilliant child may remain in the same room as his age-mates, or he may be placed in a special room with other brilliant children. All these possible procedures have their advantages, what the proponents of each do not always realize is that all of them also have their disadvantages. The typical arguments are summarized in Table 15. The basic contrast is between academic adjustment and personal adjustment. The reader of articles on how brilliant children should be taught is likely to emerge with the conviction that the gifted can develop their minds only at the expense of their personalities, or vice versa, but that one or the other has to be at least partially sacrificed. The writers are not in agreement with this conclusion. There seems to be plenty of evidence that acceleration has a beneficial effect upon schoolwork and some evidence that it does not interfere with personal adjustment. Thus, in several recent studies of accelerated college students, the accelerated did better work than those of average age, more of them graduated, and more of them participated in student activities.

¹⁰ Terman and Oden, *op cit*, p. 105

¹¹ *Ibid*, p. 225

Table 15 METHODS OF DEALING WITH SUPERIOR CHILDREN

<i>Method</i>	<i>Advantages</i>	<i>Disadvantages</i>
1 Leaving child in regular room	Child remains with his age-mates Competes in games with those smaller than himself	Child wastes his time, becomes bored, learns to loaf, often becomes a problem from idleness, does not acquire love of learning
a Same curriculum as for other children		
b Enriched curriculum more of same subjects.	Same as above	Child finds work somewhat more interesting, but much of what he learns is still too easy
c Enriched curriculum new subjects	Same as above Subjects are more likely to be challenging and to follow child's interests	Child is aware that he gets special treatment Administration is difficult for teacher
2 Putting child in special class with other brilliant children	Child learns more and competes with his peers He also learns to work efficiently	Child is separated from his out-of-school friends He may become conceited His class group is probably of several chronological ages
a Enrichment but no acceleration	He usually loves school He gets better teaching	
b Enrichment plus acceleration	Same as above	Same as for above but more so Child may become quite isolated New interests also erect a barrier He gets little training in democracy or in adjusting to his mental inferiors
3 Accelerating child by either special class or double promotions, into a room with pupils from 2 to 3 years older than he	Same as for 2a and 2b Years of productiveness increased.	Child cannot compete socially or in games with children who are more mature and bigger He is likely to become a social outcast and to overconcentrate on books
<i>For high schools</i>		
4 Allowing elastic schedules that permit student to take as much as he can pass	Pupil is interested in his work, he has enough to keep him busy, he is laying the foundation for college work	Pupil may be overtrained or may take so much work that he has no time for social activities

The question whether or not to advance pupils must be answered by studying the effects of acceleration or nonacceleration on both schoolwork and personal adjustment. Already there are several studies of the effect of allowing secondary school students to condense their high school and college education into seven years instead of eight. Such a program has been followed at the University of Chicago, Ohio State University, Columbia, Harvard, Yale, and Princeton—and on a smaller scale elsewhere. In all cases, no harm seems to have been done. Results from one excellent study are summarized in Table 16.¹² The students concerned were accelerated

Table 16: ADJUSTMENT OF ACCELERATED COLLEGE STUDENTS

	Ages at Graduation					
	Under 21	21	22	23	24	Over 24
Per cent having B average or higher	34	28	19	14	11	19
Per cent participating in activities	90	89	80	79	82	66
Median number of activities	3	3	2.5	2	2	1.5
Per cent holding offices	27	28	19	14	22	10
Median percentile in intelligence	91	81	76	71	72	75

Based on S. L. Pressey, *Educational Acceleration: Appraisal and Basic Problems*, Ohio State University, 1949, p. 63.

during the war years. They compare favorably with a control group made up of students of the same intellectual level. In every way they were as good as, or superior to, those who took four years instead of three. Detailed comparison of the accelerated and control groups gives the following information, which is based upon personal testimony.¹³ The accelerated students reported less strain, less feeling of limitation in social activities, less interference in the production of their best work, more challenge in their courses, and a great satisfaction in the saving of time. More of them continued with education after college and more were employed, they married about a year sooner than the members of the control group and are taking an equal part in community activities as adults. A slightly smaller proportion (2 per cent) were married, and 7 per cent fewer had children.

One other long-time study might be briefly summarized. It is a follow-up investigation of Amherst graduates between the years 1880 and

¹² M. A. Flesher and S. L. Pressey, "War-Time Accelerates Ten Years Later," *Journal of Educational Psychology*, 46:228-238, 1955.

¹³ See R. Strang, "A Symposium on the Gifted Child," *Journal of Teacher Education*, 5:210-232, 1954; N. Kogan, "Studies of College Students," *Journal of Counseling Psychology*, 2:129-136, 1955; S. L. Pressey, "Age of College Graduation and Success in Adult Life," *Journal of Applied Psychology*, 30:226-233, 1946; I. A. Berg and R. P. Larson, "A Comparative Study of Students Entering College One or More Semesters before Graduation from High School," *Journal of Educational Research*, 39:33-41, 1945.

1900. Since these graduates were exclusively men, it is relatively easier to judge of their success in life than is the case among women graduates, most of whom spend a major part of their lives bringing up children—an activity in which it is extremely hard to evaluate success or failure. Among the Amherst graduates, the better adult achievements were found among the youngest, and the highest percentage of failures among those who graduated after they were twenty-five years of age. The figures in Table 17 tell

Table 17 AGE IN COLLEGE AND SUBSEQUENT SUCCESS

<i>Age at Graduation</i>	19	20	21	22	23	24	25	26	<i>Over 26</i>
1. Per cent nationally known	29	22	15	12	10	3	2	3	—
2. Per cent failures	4	6	6	5	2	3	6	11	15

From S. L. Pressey, "Age of College Graduation and Success in Adult Life," *Journal of Applied Psychology*, 30 228, 1946

the story. It is suggested that the older—not the younger—students were maladjusted to college work and college life and that they carried this handicap into the adult years, and that their deferred graduation took too large a slice out of their most vigorous years, with a resulting failure to get really started upon a career before the waning of vitality overtook them. Before passing final judgment upon this vindication of acceleration, one would want to know what became of the 67 per cent of nineteen-year-old graduates and the 72 per cent of twenty-year-old graduates who did not become nationally known and were not failures. If they lived lives that were just as normal as those of twenty-one-, twenty-two-, or twenty-three-year-old graduates, one has to grant the advantages of acceleration.

If any permanent damage had been done by acceleration, it ought to appear in the Terman follow-up studies. In their school days, over 4 per cent of these children were accelerated from three to four and a half years, 24 per cent were accelerated from two to two and a half years, 50 per cent were accelerated from one to one and a half years, and 12 per cent, one semester. All but 10 per cent finished high school before they were eighteen. Ninety per cent were, therefore, accelerated more or less. The boys of the group have made a more than satisfactory adult record, as indicated by Table 18. Since the possible harm done by their rapid advancement through school does not show in their occupational level, their mental health, or their divorce rate (which is about one fifth of the average for the country) one wonders if the presumed danger has not been exaggerated.

Those who favor enrichment rather than acceleration offer the following kind of argument. When superior children are allowed to move rapidly through the grades they lose the normal, close, daily contact with their age-mates and enter a group of children who are so big that the young accel-

Table 18 OCCUPATIONS OF TERMAN'S GIFTED CHILDREN AS YOUNG ADULTS

<i>Type of Occupation</i>	<i>Men from Terman Study</i>	<i>Employed Men in California</i>
	%	%
Professions	45	6
Semiprofessions and business administration	26	8
Skilled clerical work or retail business	21	24
Farming	1	12
Semiskilled work	6	32
Unskilled work	1	18
Total	<u>100</u>	<u>100</u>

From L. M. Terman and M. H. Oden, *The Gifted Child Grows Up*, Stanford University Press, 1947, p. 172. Used by permission of the publishers.

erates cannot play with them and so mature in their interests that the younger children cannot fit into their social groupings in or out of class.¹⁴ With the coming of puberty the differences between the young brilliant child and his older classmates are intensified. Even though superior children mature earlier than children of average ability, their acceleration in school may be so great as to offset their maturity. Some of them enter high school before puberty. Consequently, the discrepancy in emotional reactions and social interests is brought into high relief. They do not fit readily into extracurricular activities at the high school level. They cannot get excited about dances and parties, they have little interest in members of the opposite sex, and they are not big enough to be successful in athletic competition. Their nonacademic problems are therefore likely to be acute. It is undoubtedly true that a brilliant child can be accelerated too much, as has been repeatedly demonstrated by case histories. The above argument applies in such instances, but it does not necessarily apply to any advancement at all for any pupil.

It is the writers' opinion that since the brilliant child is large and mature for his age, he may be somewhat accelerated without serious harm. The degree to which extra promotions are desirable depends upon the non-intellectual characteristics of each individual child. Some superior children are so babyish in their behavior that they become the butt of jokes if they are advanced into a grade with older and bigger children, others are so mature that they take their place more naturally with slightly older children than with those of their own age. The best solution lies in the individual approach. And it may very well be that the best time to accelerate is not

¹⁴ R. K. Boardman and G. Hildreth, "Adjustment Problems of the Gifted," *Under-standing the Child*, 17:41-44, 1948.

at the elementary level when children are growing rapidly but in secondary school, after they have matured

Schoolwork for the Gifted The greatest single need of the brilliant student in high school is a course of study that will stimulate him into putting forth his best efforts and will prepare him for subsequent academic work The curriculum for superior students in high school should certainly lead to a real mastery of the tools of learning as well as to the establishment of efficient habits of study The brilliant adolescent should learn one modern language, at least, he should read until he has made a start at getting acquainted with his heritage of culture, he should develop a large general vocabulary and the beginning of several technical vocabularies, he should obtain a mastery of elementary facts in biological and non-biological science, he should reduce elementary algebra to a technique he can use, he should know the outstanding facts in the history of the world and have some grasp of social and economic developments, he should be able to express himself correctly and easily in writing These are the tools of the brilliant mind, without them, thinking on the higher levels cannot be done The ordinary high school course fails to provide the superior student with those essentials which must act as a basis for his future development if he is to take the place in social evolution reserved for the talented A fine social adjustment and agreeable personality will not atone for the lack of these elements of thought essential to the academic levels beyond high school

It is not necessary to alter the essential nature of the curriculum, although minor adaptations to each group of gifted freshmen are desirable There is nothing the matter with the traditional subjects, except that the students who would enjoy them are not given large enough amounts of such intellectual food to satisfy their hunger The study of Greek grammar, for instance, even in the traditional manner, can be an exciting experience for a group of linguistically talented young people who already have the necessary background and training for the work In fact, many of them will like it better than they like a highly "modernized" curriculum because it is more exacting and demands a more satisfying use of superior talents

A second characteristic of high school education for the brilliant pupil is that it must give him training in self-discipline and hard work Genius may not be an infinite capacity for taking pains, but it cannot grow without an infinite capacity for concentrated effort The really superior student learns so rapidly and forgets so little that ordinary classwork calls for barely more than a casual glancing at assignments. Most people simply do not realize how little the burden is.

A few examples may illustrate this point A friend of one of the writers arrived at college five days before classes began Not wanting to waste her time, she looked up her teachers to see if there were not some subject on which she could

start work. The one professor she found in residence loaned her a copy of an Old English grammar and reader. The girl memorized the various word forms and read the stories in the back of the book in exactly five days, returned the book at the first class meeting, and made no preparation whatever during the following semester. In fact, she did not even buy a book, but she got an A. Another friend remained at college over the Thanksgiving holidays. Between Wednesday noon and the next Sunday night she did the necessary reading, planning, and writing for term papers in two courses. Each occupied about twenty typewritten pages, and both were retained by the professors as excellent examples to show subsequent classes. Another friend who was a brilliant freshman in chemistry—and has since become an outstanding research chemist—left twenty “unknowns” that she was supposed to solve one at a time during a whole semester, until a spring afternoon, when she ran the entire lot through the analysis at once. The work took her about seven hours, and she was the only student in the class who found every element in every unknown. Another friend was given two weeks in which to look up such materials as she needed to write a one-act play based upon some dramatic incident during a given period in history. She went home from class about three o’clock in the afternoon, wrote the play at once, typed it before dinner, put it away in her desk for two weeks, and did no work on the course during the next two weeks. The teacher gave the paper an A, and the other students selected it to present, practically without change, to the entire school.

For such young people the usual assignment is so easy as to be a joke. It can be left till the last minute and then tossed off casually. The superior mind derives no training and little profit of any kind from it. Most certainly a superior mind will not be of much use to the world unless its possessor learns how to harness and drive it.

Third, the material to be learned should be presented in a stimulating manner and the student encouraged to use his initiative and originality to the greatest possible degree. Nothing is more fascinating to a person of alert mind than the process of thinking. The teacher of superior students should give them continual opportunity to demonstrate insights, to reason out problems, to make conclusions, to sense interrelationships, to handle ideas, to discuss theories, to see unity behind multiplicity. To provide for maximal stimulation, brilliant students should come into contact with the finest minds on the teaching staff. A successful teacher of brilliant students once gave one of the writers the following recipe for the proper instruction of superior students: “First, you demand the impossible, and then you keep out of the way while the youngsters deliver it.” This capsule of methodology is useful for those who work with superior young minds.

Finally, a brilliant student’s studies should be arranged so that he sometimes works with groups and so that some of his work is directed toward service to the school. A superior student’s first jobs are to master basic ideas, to learn how to work, and to develop his native talents, because by becoming himself he can best serve the world. That is, his immediate

aim is self-development, but his ultimate aim is service. At the secondary school level, as at any other, he sometimes needs to work alone. However, there are always in progress several joint projects and some of immediate social usefulness, and in these he should do his share, like any other student. For instance, a few bright youngsters who are interested in botany can prepare a properly collected and labeled exhibit of local flora, if the project is well planned, they will learn a good many facts about botany, and they will develop social skills and ideals of service without which their talents cannot be put to the best use. Gifted adolescents need an ideal of service, and they need experience in joint undertakings, but not all their work should be "socialized." The solitary burning of the midnight oil is the natural way of genius.

So also is the passionate concentration on things that are of only moderate interest to children of average abilities. The resulting absorption marks off the talented from the merely bright as clearly as anything could. As the mother of a boy with high musical talent once said to one of the writers, "My son is a perfectly normal twelve-year-old boy, except that he practices the piano five hours a day." This boy played in the school orchestra and school band, he wrote school songs for various occasions, he played works of a different composer for two hours once a month in the school auditorium with the doors open for other students to come and listen, he was on the school swimming team, he took his part in preparing programs for school assembly, and he often played the hymns for the Christian Association meetings. He was accepted by his age-mates, although he was not especially popular. This boy's social adjustment was as good as one could expect. He was not isolated, he could get along with others on a common job, and he had a sense of service. But what twelve-year-old boy is "perfectly normal" when he willingly practices on the piano five hours a day and assiduously avoids any activity that might conceivably damage or even dirty his hands?

It is hard to find exactly the right teacher for a group of brilliant adolescents. He or she must be a person of wide cultural background and high intelligence. Otherwise the class will get ahead of the teacher. Superior minds go shooting off in all directions and are not inclined to generate respect on the part of those whom they can outdistance. The teacher must be interesting and challenging and highly sensitive to the needs of the students. The goals of teaching are the same as those for any other group of students, but the procedures have to be so oriented as to bring out the best efforts of each pupil. As will presently be pointed out, brilliant pupils need sympathy and guidance, but their problems are somewhat different from those of the average adolescent. Above all they need a teacher who can give them enough to think about and can stimulate them into the creative thinking of which they are capable. Probably the special courses of training for teachers of gifted adolescents do something to help provide

adequate instruction, but training has little value unless those being trained are the right sort of persons to begin with

If a school really wants to provide proper nourishment for its superior students, it could hardly do better than to follow the suggestions that have already appeared in print and are quoted below

- 1 Appoint a good supervisor for the gifted
- 2 Make a survey of the entire school system to locate those pupils who are superior
- 3 Select some already excellent teachers and give them adequate training
- 4 Provide for special materials needed, especially books.
- 5 Plan for constant guidance
- 6 Plan for continual checking of academic progress, social adjustment, and relation between output and potential for each pupil
- 7 Develop longitudinal records, with provision for two or three follow-up studies at intervals of perhaps ten years
- 8 Provide for research, so that there will be objective evidence of the success or failure of each treatment that is tried
- 9 Help the teachers develop leadership among the brilliant
- 10 Stress service to others ¹⁵

A few illustrative examples of work appropriate to bright pupils in various school grades are quoted below. Work of this type should be begun early, partly to keep the children interested in school, partly to prevent them from becoming loafers, and partly to lay the necessary foundation in independence for the relatively complex projects at the college level. The list below includes brief statements concerning a number of approaches that have been found useful

A Experiences in intercultural relations

- 1 A group looks into its own background
In a city that contained several foreign colonies, the pupils studied the history, customs, and adjustment to American life of (a) Pennsylvania Germans, (b) Hungarians, and (c) French Canadians
- 2 A high school group holds a Pan-American Conference
Small groups of students represented each South and Central American country and met to discuss common problems

B Creative speech work in high school. In one school the superior students

- 1 Organized a speech institute which offered to every class and teacher in school well-prepared, factual, dynamic, and well-organized talks on eighteen different topics
- 2 Organized a "Town Meeting of the Air" radio program
- 3 Acted as judges for approximately twenty debates held in geography classes of the school

¹⁵ Based upon G. Hildreth, "School-wide Planning for the Gifted," *Educational Administration and Supervision*, 41 1-10, 1955.

- 4 Presented two open forums and two debates before the entire students' assembly, as well as before civic clubs
- 5 Prepared for and competed in interscholastic contests in debate, oratory, and extemporaneous speaking ¹⁶

C Seminar for seniors

The group was composed of twenty-three seniors, all of whom were honor students. Each pupil planned his term work around his scheduled program for that term, selecting a topic that would relate to several classes. A library corner was assigned to this group, and the librarian aided in the supervision.

D. Projects in Science

- 1 A group of freshmen made an exhibit of the flora of the high school grounds. They collected specimens, classified them, made posters, and so on.
- 2 A group of students experimented with plant growth. The teacher gave each student six identical seeds. Each pupil planned for himself what conditions he would study: degree of moisture, amount of sunlight, type of soil, added kinds of nourishment, and so on. Each pupil kept his own record of plant growth and wrote a paper presenting his conclusions about the factors he had studied.
- 3 Students may collect from their friends as many questions as they can about some natural phenomenon—an airplane, for instance. They sort the questions and find as many answers as possible. Then they write a report, to be presented at the school assembly.
- 4 Students may prepare a series of posters or other display materials on such topics as *Physics in Your Daily Life*, *Chemistry in Your Daily Life*, *Botany in Your Daily Life*, *Geology in Your Daily Life*, and so on, for the use of other students who have less knowledge of science but need the information.

In three respects, then, the treatment of brilliant students should differ from that given their classmates, and in one respect it should be parallel. In the nature of the material studied, in the amount studied, and in the manner of presentation their work should be different, but in its training for social participation and social responsibility, it should be the same. If such a program were adhered to, the awakening of the superior pupil would more frequently take place in high school, instead of being delayed till the last years of college and sometimes even later. The curriculum as taught in many present-day high school classes involves a tragic waste of the best intellects in each generation of students.

Characteristic Problems of Brilliant Pupils The superior adolescent has problems of various kinds—intellectual, vocational, social, and emotional. His chief intellectual problem is to find something on which to sharpen his wits. A second problem in the same field is the delimitation of his interests. The brilliant adolescent is typically the person who sets out

¹⁶ Summarized from E. H. Martens, "Curriculum Adjustments for Gifted Children," *United States Office of Education Bulletin*, no. 1, 1946, 82 pp.

to master the entire universe. His intellectual interests need to be focused, not diffused. He often requires guidance into an extra-heavy load of those courses that will furnish a sound preparation for later work.

The main problems of a brilliant adolescent are undoubtedly personal. He has the same problems that any other boy or girl of the same age has, but in addition he generates some of his own. It is hard for him to learn tolerance of those who are not as quick as he is. Since he is bright, he cannot help noticing that he learns faster and does better schoolwork than other children. He therefore tends to become domineering and altogether too sure of himself, because he knows more than his age-mates, he thinks he knows it all. He is almost sure to be verbally clever, and this tendency, if unrestrained, easily makes him a "smart aleck." One of his outstanding characteristics is his ability to concentrate upon what he is doing, but this ability can also lead him astray because he thinks too much about his own affairs and too little about the concerns of others. A superior adolescent has already developed certain abilities beyond the normal for his age, and along these lines he is especially successful. Because he is successful, he is likely, if left to himself, to concentrate more and more upon his special interests. The things he likes best to do are precisely those that will further widen the gap between him and his own age group. Genius carries within itself the seeds of its own destruction, and one job of the school is to keep this vicious circle from developing. There is usually nothing wrong with the fundamental social ability of brilliant pupils, but sometimes, through sheer neglect, they do not develop these abilities.

The relatively few brilliant students who are seriously maladjusted show their condition clearly enough. Outside class they either stay by themselves or fling out caustic remarks about the utter futility of all nonacademic pursuits, or publicly refuse to attend football games, dances, or other such activities for which social rather than intellectual maturity is necessary. They tend to play with younger children or to hang around adults. In short, according to their degree of vitality and combativeness, they show either a humiliating acceptance of their social ineptitude or else a derisive attitude toward others—an overcompensation for their maladjustment. These attitudes are not typical of genius but they do exist, and quite unnecessarily.

Although gifted adolescents usually do outstandingly good schoolwork, they sometimes do not. One investigator studied twenty boys between the ages of fourteen and eighteen who had high IQ's but did poor work in school.¹⁷ These boys were paired with others of the same IQ who were doing the type of work expected of them. Both groups were studied by means of interviews and tests of personality. The "underachievers" were

¹⁷ B. Kimball, "Case Study of Educational Failure during Adolescence," *American Journal of Orthopsychiatry*, 23:406-415, 1953.

much more passive, more anxious, more repressed, more negative in their reactions to people, and were inclined to feel inferior. Moreover, they had an unusually large number of psychosomatic disorders. In short, they had ability, but they were prevented from using it efficiently by their sundry nonintellectual handicaps. One typical boy in this group had an IQ of 141 but stood almost at the bottom of his class. He came of parents that were highly intellectual and had expected great things of him, but they were not able to supply much human warmth. He felt neglected, especially by his father. As his parents made it clearer and clearer to him that they regarded all their efforts to help him as futile, his work became worse and worse. Such instances show that the brilliant adolescent needs support just as much as any other child of his age. Although relatively few brilliant students fail to work out some kind of adjustment for themselves, even in adverse circumstances, there are always a few who fail to realize their potentialities because of personal maladjustment.

The case studies below illustrate some of the problems of brilliancy and some of the possible solutions. The reader can doubtless add more from personal observation.

Leopold was the oldest son of a rather wealthy family.¹⁸ His IQ on several tests varied from 155 to 165. As soon as he entered the first grade of school it was at once evident that the work was far too easy. Leopold had been reading since he was four years old and hardly needed the word drills of the first grade. His facility with numbers was also extraordinary, and he was entirely fascinated by music.

His parents' first adjustment to the problem of educating Leopold consisted in advancing him to the second grade at once and then sending him to school only for the morning session, during which he took part in all group activities and spent the rest of the time in helping slow readers or giving extra drill to children who did not know their number combinations. He also helped the teacher make and put up decorations. His penmanship and spelling were relatively poor, and he took a normal part in the classwork devoted to these subjects. During the afternoon he practiced the piano and flute, took music lessons, studied catalogues of phonograph records, selected what he wanted, rearranged his collection, listened to his records in various sequences, and generally amused himself until his age-mates were out of school. He would have remained absorbed in his music for hours if his mother had not interrupted him every day at three thirty and sent him out to play until dinnertime. On Saturdays he was not allowed to spend any time in musical pursuits, but on Sunday he sang in the church choir and spent most of the afternoon listening to records. This general routine continued throughout elementary school. Aside from his first advancement of one year, he was never accelerated. He did a great deal of outside reading, upon which he reported to the class, he helped slow pupils, and he generally made himself useful. The other pupils liked him, although most of them realized that he was "different." As one small boy explained to Leopold's mother, "He's so nice, you forget how bright he is." Leopold early acquired

¹⁸ This case should be compared with that of Oscar on pp. 287-288.

the attitude that because he could learn faster than others he had more time in which to be of some use in the world

At the end of elementary school Leopold's parents felt that he was not learning as much as he easily could learn and that he was therefore wasting much of his time. On the other hand, they did not wish to interfere with his excellent social adjustment. During the year that Leopold was in the eighth grade they began to talk about spending some time in Europe. They brought home a number of travel books, many of which Leopold read. Gradually, they broached the idea of a year's schooling in France or Germany, where he could learn another language. Leopold himself proposed a school in Switzerland where he could learn two or three languages. He and his parents therefore spent a couple of months in Switzerland where he visited several schools and enrolled in the one he liked best. His parents remained near him for another six weeks, by which time he was so engrossed in learning French, German, and Italian, in going to concerts, in taking piano lessons, in practicing, and in participating in all sorts of school activities that he hardly knew when they left. The other boys at the school were of many nationalities, and Leopold learned to adjust to them. He remained there for three years, during which he completed enough courses for entrance to an American college. Each summer he came home and renewed his friendships. The first summer he went off to a camp, but the last two he spent at home, playing tennis, going to parties and picnics, swimming, and dancing. He was the first boy in his group to own a radio, and as a result his home became the rendezvous for the "crowd."

It will be noticed that Leopold gained another year in academic standing during secondary school, but he hardly realized it because he was in small, ungraded classes most of the time. Even though he learned three languages to the level of fluent use, added violin playing to his other accomplishments, took singing lessons, learned to ski and skate, and read three books for every one read by other pupils, he finished the work of an American twelfth-grade class and entered college before his seventeenth birthday.

At this time he was average in height and above average in weight for his college group. He played ice hockey, basketball, and soccer, he made the freshman swimming team, he joined the band, the choir, the orchestra, the composers' club, the Deutscher Verein, the French club, and the Christian Association (this last mainly to play the organ for the hymns). His first year he carried a normal sixteen hours of work, the next year he was permitted to take twenty, and the last two years twenty-five and twenty-six respectively. In most classes he received A's and had no mark below a B. During his junior year he was elected as one of the judges of the student court and as a senior he was president of student government and of his own fraternity. He made Phi Beta Kappa but never wore his key until he was middle-aged. He was much prouder of the letter he won in basketball.

Leopold chose to complete his education by becoming a musicologist. He also studied composition and has done quite a little composing as an avocation. He is also a volunteer member of a well-known orchestra. Since taking his Ph.D. in musicology he has fitted out a yacht with the necessary recording instruments and spends part of his time doing valuable research at the ends of the earth. He specializes in such investigations as are too expensive for the average scholar to undertake, even with a moderate backing from national research funds. Leopold's

work is first class, his reputation is excellent, and he is a normal and delightful individual. There is nothing of the long-haired genius about him, and unless he is among other specialists he does not talk in an erudite manner. As his garage mechanic says, "That man may be a prof and a millionaire, but he's a regular guy, same like me."

During the war Leopold wanted active service, but he was assigned to Intelligence and spent most of his time listening to and translating foreign broadcasts. This man's parents were, of course, aided in their treatment of him by the fact that they were wealthy, but more important were their sanity and their understanding of his needs and problems. Leopold is now a normal, useful adult whose actions are governed by a strong sense of social responsibility.

Ruth T. is at present a successful writer of fiction. She is as well known as any woman writer in the United States, and her name is one of the few that are likely to be remembered fifty years from now. Ruth's history is of special interest, partly because it covers the years of fulfillment as well as those of promise and partly because she had the kind of difficulties that beset the brilliant child and adolescent.

Even as a baby Ruth was extraordinarily active. From her earliest days she showed a remarkable motor control and high verbal ability. She began to read before she was four years old, no one taught her, but she pestered her parents and older siblings until they told her what this or that word meant. In fact, she learned in spite of parental desire to have her wait until she was older. As soon as she entered the first grade Ruth began to have difficulties, chiefly because the work was so ridiculously easy. Since nothing in the work of the class challenged her attention she became impatient and tried to make a more interesting life for herself by bringing a copy of *Treasure Island* to school with her and reading it instead of the primer. This intelligent and mature reaction resulted in punishment. Ruth was told she must read what the other children did. When she persisted in bringing the book a second time, her teacher ordered her to read the assignment out of the primer before she went home, but this she refused to do on the grounds that it was nonsense. At five o'clock a small, stubborn child and an exasperated teacher still faced one another, the primer still unread. Ruth's father ended this particular deadlock by taking his daughter not only home but out of school altogether and enrolling her in a small private school in which the pupils received a good deal of individual attention. By the time she was eight years old Ruth had completed the first six grades of school. Her teachers wanted to slow down her rate of progress since she would otherwise be ready for high school before she was twelve. Ruth's own choice was to begin Latin. This subject was hard enough to prevent her from advancing more than one grade each year for the next three years. By then, however, she was again going too fast, so she learned first French and then German. With three languages acting as dragging anchors against too much speed she did not reach high school until she was a normal fourteen, but she had already mastered a sizable piece of secondary schoolwork.

During her childhood years Ruth had two groups of friends. One consisted of the other pupils in her private school, most of whom did not live near her,

and the second of the children of her age who lived in her neighborhood. With both groups Ruth was on excellent terms. There was not a great deal of social life at her school, but she took a normal part in whatever was going on. Usually she played two or three hours every afternoon with a small group of girls who were about a year older than she. Ruth differed from the other girls of her age in two ways: her extraordinary motor co-ordination made her successful at typical boys' games and she often played with boys rather than girls, and was accepted by them as an equal. The second difference was that her chum was a girl of very low social standing but possessed of a mind nearly as quick as her own. From the chum she obtained a degree of intellectual stimulation that she did not find among girls of her own social class, and even in childhood she was independent enough to do what gave her satisfaction. There were times when her various attachments and loyalties clashed with each other, but by the years of adolescence Ruth had become adept at maintaining several sets of social contacts at once. She was rarely a leader, but she was always reasonably popular.

Ruth entered the public high school, where she found herself a year behind most of her friends, since they were chronologically older than she and she had purposely been held back. With characteristic independence she went to the principal, arranged to take examinations in her languages, and to elect enough extra work to let her catch up with her friends. The heavy load kept her moderately busy for a year, but soon after her sophomore year began she again became bored from having nothing to do and started to get into mischief, to talk back to her teachers, to be a "smart aleck" in class, and to do all manner of bizarre things. Punishment merely brought out her aggressiveness—often giving her a chance to be verbally cleverer than her teachers—and she was soon in conflict with the school. Again her parents withdrew her from public school and sent her to a private academy, where she found what she most needed—a heavy schedule, an active social life, a great many competitive games, and a stimulating faculty. She was given extra work in practically every class and especially in those in which she showed the slightest tendency to become troublesome, since her teachers realized that this superior student simply must be kept busy or her active and independent mind would soon lead her into defiance of authority. In the course of three years Ruth took almost every class offered in the school and carried out a number of extra reading and writing projects. She was in great demand as a writer of skits and songs and even entire plays. And she had to be firmly dissuaded from writing themes for her classmates. In her senior year she voluntarily read epics in Latin, Greek, French, German, and Old English—which she had studied by herself one summer—located what she regarded as roughly parallel passages, translated them into corresponding meters in English, and wrote a commentary of some thirty typewritten pages. This labor of love kept her busy for weeks but did not prevent her from winning the school's scholarship prize or from taking first place in the Regents' examinations. In both secondary school and college Ruth was a member of many school athletic teams and belonged to a normal number of clubs. She was moderately popular and had many friends. After her first year in college she acquired a reputation of being something of a genius and was therefore permitted to show slight eccentricities.

By the end of her college career Ruth knew that she wanted to be a writer, but she also knew that she had nothing yet to say that the public might want to hear. After graduating she first got a small job on a newspaper, then a minor position with a publisher. In her free time she constantly wrote, but threw almost everything away. Then for two or three years she did library research for other writers, eventually becoming a steadily employed ghost writer because of her facility in imitating styles. At thirty she married a surgeon somewhat older than herself and had two children. She was over thirty-five when she wrote her first novel, which was immediately successful. Since that time she has kept the home fires burning, brought up her children, been active in the political life of her city, and written a great many short stories and novels.

Ruth did not have a completely easy and comfortable childhood or adolescence. She had to learn to work with others who were slower than herself and to keep out of trouble. Her quickness often betrayed her into hurting the feelings of those she loved, and her independence of mind stimulated her into one revolt after another until she was mature enough to harness it. Her love of winning drove her into a good deal of senseless competition until she got it through her head that winning was not important. In short, she had many of the typical difficulties of the superior student.

Franklin is a young man of great native talent as an artist. In his first year of high school one of his teachers discovered quite by accident that he had great talent at drawing pen-and-ink portraits. The boy had never had any training, but he amused himself during recess by drawing sketches of the other pupils. Usually, his half-dozen lines caught the likeness of the person he was drawing. During high school he took one course in drawing, but he had no intention of going further, for his father was anxious to have his only son enter the family business. Probably Franklin would have done so, had the war not whisked him off to a lonely island in the Pacific and had the Army not realized—somewhat belatedly, perhaps—that Franklin was of more use drawing pictures than helping to man an outpost. When he returned home, he made it clear that business was not his metier and he entered a good art school. Because he wanted to contribute as soon as possible to the family finances, he took the commercial art course, got a job even before he graduated, and has risen steadily until now he is a fairly wealthy man of about forty. Unfortunately, this gifted lad was almost completely lacking in ambition, beyond a desire to be financially comfortable. Neither his family nor his wife has any real interest in the development of his undoubted genius, and he will probably remain a commercial artist all his life. Once in a while he still paints a portrait, but he will not put in either the time or the effort needed for success in what he can really do best. Franklin is a good example of the right talent and the wrong personality.

In recent years there have been repeated searches for talent among young people and increased interest in the best methods of training those with superior native endowments. One proposed program for research is presented on pages 237-238.

RESEARCH NEEDED ON GIFTED CHILDREN

- 1 What are the relative merits (emotional, social, intellectual) of various administrative plans for the gifted, such as the following?
 - a Keeping the child with his chronological age group and enriching the curriculum?
 - b Locating the child close to mental age level, among older children?
 - c Retaining the child in his own age group in some subjects and advancing him in others?
 - d Establishing special classes for children with rapid mental growth?
 - e No special plan
- 2 What conditions can be recognized as correlated with each of these procedures?
- 3 Which plan gives the best over-all results for the child?
- 4 What is the effect upon the child of organizing his schoolwork as follows?
 - a In terms of greater quantity of work at the same level?
 - b In terms of introducing additional subject matter?
 - c In terms of advancing to higher levels of abstraction in the work provided?
- 5 What should be the relation between ability and performance?
 - a To what extent is there "concealed failure" when a child works below his level of achievement, even though he gets good marks?
 - b What personality correlates are there of "concealed failure"?
 - c What factors contribute to it?
- 6 What is the teacher's role in training the gifted?
 - a What effect does the teacher's personality have upon the gifted child?
 - b What, if any, are the special qualifications of a good teacher for the gifted?
- 7 What guidance should be given toward a lifework?
 - a Is it desirable to explore vocational interests and aptitudes early in life?
 - b What are the effects of vocational guidance at various age levels?
- 8 Do close personal relations become established between children of widely different mental ages?
 - a Does the gifted child need companions close to his own mental age, in order to experience close relationships?
- 9 Are there special frustrations that affect the gifted child?
 - a In his family? his neighborhood? his classroom work? his extracurricular activities? his job placement?
- 10 Does a gifted child experience particular satisfactions?
 - a If so, what are they?
 - b What is their effect upon the child?
- 11 What factors account for any undesirable personality traits in the gifted?
- 12 Are the gifted a special minority group that receives some of the typical hostilities commonly directed toward such groups?
 - a If this occurs, what is the effect on the child?
 - b Are there recognizable elements in school or community that attack the gifted child?
- 13 Does the gifted child have special needs with regard to his ultimate development as a desirable citizen?

- a If so, what subject matter might meet these needs?
- b At what age should it be introduced?¹⁹

The greatest natural asset of any country is its gifted young people,²⁰ who will be able to make great contributions to their generation, provided they can obtain the education and adjustment to society that they need

The Adolescent with Inferior Mental Capacity

When the extent of individual differences was first realized it was tacitly assumed that mentally inferior individuals furnished the criminals, the paupers, the unemployed, and the unemployable. More has since been learned as to the nature of mental inferiority, and of late years much has been done in the way of adjusting dull people to their environment—and vice versa. It now appears that while delinquency and other forms of asocial behavior are more frequent in a group of dull adolescents than among average or bright youngsters, they are by no means necessary accompaniments of mental inferiority.

The individuals whose mental capacity is below the average of the population may be grouped roughly into four divisions. Lowest are the idiots, whose adult mental age does not exceed two years, they never go to school. Next come the imbeciles, with a mental age from three to seven or eight years, by the time they are adults they can complete about the first two grades of school, provided the methods of teaching are appropriate. Then come the morons, with an adult mental age from eight to eleven, few of them can finish elementary school with understanding and mastery of the material, but some of them do get into junior high school in these days of generous promotion policies. Finally come the dull children, with adult mental ages between eleven and thirteen and IQ's of 70 to 85. These pupils form the intellectual deviates at the lower end of the high school distribution. In considering high school pupils, the first three groups may be eliminated from consideration, except as results with them illustrate what may be done even more successfully with the fourth group.

It is necessary also to differentiate between feeble-mindedness and mental retardation, between absolute and apparent feeble-mindedness, and between true defect and social or educational impairment.²¹ If a child is

¹⁹ Adapted from American Psychological Association, "Needed Research on Gifted Children," *American Psychologist*, 9 77-78, 1954.

²⁰ See, for instance, D. Wolfe, *America's Resources of Specialized Talent*, Harper & Brothers, 1954, 332 pp.

²¹ E. A. Doll, "Mental Deficiency and Neurophrenia," *American Journal of Mental Deficiency*, 57 477-488, 1953; E. A. Doll, "Feeble-mindedness vs. Intellectual Retardation," *Journal of Educational Psychology*, 40 569-573, 1947; W. H. Guertin, "Differential Characteristics of the Pseudo-Feeble-minded," *American Journal of Mental Deficiency*, 54 394-398, 1950; D. Safian and E. Harms, "Social and Educational Impairment Wrongly Diagnosed as Feeble-mindedness," *Nervous Child*, 7 416-420, 1949.

truly feeble-minded, he is also socially incompetent, by the definition of former days, he is one "who cannot handle the ordinary affairs of life with prudence" The mentally retarded child may have no higher intelligence, but he is socially competent That is, he cannot learn what is in books, but he can learn to lay bricks, or to play an oboe, or to mix sodas, or to work on a farm, and because he gets along well with other people, he can probably, after being properly trained, hold a job and stay out of trouble. It is easy for an inexperienced person to mistake such conditions as deafness, withdrawal from reality, chronic illness, or emotional conflict for mental defect Neurotic children are often so confused by their environment as to present a picture of stupidity The "problem" child's true ability may be well concealed behind his misdeeds and his constant hostility. The pupil with undiagnosed deafness is almost sure to be considered stupid And teachers are especially prone to mistake educational impairment for defective intelligence

In the last two decades there has been marked interest in following up the careers of defective or dull pupils who had been trained in the special classes of the public schools or in institutions for the feeble-minded In one investigation, 121 former pupils of a special class for retarded pupils were located and studied²² All of them had spent at least three years in the class. There were two groups of "graduates" from this special training, one group with an average IQ of 67 and a second with an average IQ of 72. At the time of the investigation 98 of the men were employed and had held their present job from one to fourteen years Their wages showed a normal distribution for the types of work in which they were engaged In another instance, 50 men and 24 women who had been discharged from a state training school for defectives were investigated. All were working, and two thirds of them had held the same job for at least a year²³ To be sure, most of them were doing simple chores in either a hospital or an orphanage, where they were to some extent supervised, but they were able to maintain themselves economically, although they were undoubtedly of defective intelligence A third investigator followed the careers of 210 boys with IQ's from 52 to 83, who had been trained in a special class In 1946, 113 were in active military service, 76 were doing satisfactory industrial work, 7 were still in school, 4 were dead, and 2 were sick The average wage of the 76 who were employed was \$48 a week, and some made as high as \$72. A fifth of the entire group had never been without employment.²⁴

One more report is of special interest It covers the careers of 1,000 dull

²² A. Bohroff, "Economic Adjustment of 121 Adults Formerly Students in Classes for Mental Retardation," *American Journal of Mental Deficiency*, 60 525-535, 1946

²³ E. C. Howard, "Employment of Patients Discharged from the St. Louis State Training School," *American Journal of Mental Deficiency*, 60 397-402, 1955.

²⁴ R. M. McKeen, "Mentally Retarded Boys in War Time," *Mental Hygiene*, 30 47-55, 1946

boys who had been for at least six months in a trade school. The highest IQ was 107, nearly 90 per cent had IQ's below 90, and 65 per cent had quotients from 80 down to 66. Most of these boys were dull rather than defective, but the great majority of them did not have the capacity for high school work. At the time of the follow-up 23 had died, 270 were in the armed services, and 22 were unemployable. Of the remaining 685 graduates of the school, 38 per cent were making at least \$30 a week and 20 per cent were earning as much as or more than the average industrial worker. Only 11 men (1.1 per cent) were in penal institutions.²⁵

From these studies it can be seen that dull adolescents, high-grade morons, and even some imbeciles can be trained so that the majority of them make good social and vocational adjustments in the community.

Characteristics of the Dull Adolescent Defective children are, to start with, of inferior physical development. At twenty years of age an average defective is about as tall and as heavy as a schoolboy of fifteen, but his head is smaller, and his brain is lighter. In addition, defectives have more defects of eye, ear, nose, and teeth than normal children, and they are much more likely to have speech defects. According to one authority, 10 per cent of normal children show some defect of articulation, as compared with 75 per cent of defectives. A teacher often gets the impression that dull pupils are unusually large, but this effect is produced by their customary retardation, which places them in classes with pupils two to three years younger than themselves. If compared with their age-mates instead of their schoolmates, they would appear small.

The defective shows his most severe defects, as one would expect, in the intellectual field. The dull pupil has especial difficulty with abstractions. He has little interest in ideas. He is typically a nonverbal, nonacademic person. He has difficulty in learning to read at all and rarely succeeds in achieving sixth-grade competency before he leaves school.²⁶ Quite often a dull pupil's inferiority does not become marked until the years of junior high school. He can learn the definite, factual material presented in the elementary grades, although perhaps a little more slowly than other pupils. It is not until the subject matter becomes too extensive and too theoretical for him that his defects stand out clearly.

Socially and emotionally, dull adolescents are no different from other people. They can usually make and keep friends of their own or even superior ability. They can fit into the social milieu from which they come. Indeed, these dull children often get along well in nonacademic pursuits, they are willing to be led, they are delighted with any attention shown them,

²⁵ W. J. MacIntosh, "Follow-up Study of 1000 Nonacademic Boys," *Journal of Exceptional Children*, 15: 166-170, 1949.

²⁶ R. H. Hungerford, C. J. De Prosopo, and L. E. Rosenzweig, "The Non-Academic Pupil," *American Journal of Mental Deficiency*, 53: 547-557, 1949.

and they are devoted to their friends. There is no reason to suppose that social incompetence is inevitable in dull and low-normal individuals, although many of them have developed a deep-seated hostility to the world even before they enter school because they have already experienced rejection, aversion, and discrimination.

One investigator²⁷ studied a group of defective children between the ages of seven and fourteen, with an average IQ of 55 and a range of IQ's from 43 to 72. Their social "quotients" varied from 38 to 94, with a median of 70. They were still, as a group, less effective socially than the average, but their social competence was far ahead of their intellectual level. Such studies suggest that with training, even an adolescent with defective intelligence can acquire at least a low-normal personal adjustment.

Naturally, however, many dull adolescents develop undesirable personal traits because too much is asked of them. They become discouraged, disillusioned, unhappy, truculent, and sometimes delinquent. Because good adjustment is made out of successes, not failures, such traits appear at any level of intelligence among those who believe themselves to be chronic misfits. If dull children show unfavorable traits more frequently than do those of average ability, it is because they have more reason for despair. In school they occupy an unenviable position at the bottom of the class. They soon learn that no matter how hard they try, their efforts will rarely be successful. Chronic academic failure arouses either profound feelings of inferiority, self-distrust, and physical timidity, or a defiant attitude toward the school. Outside school, an environment of urban civilization may be too complex for them. More often than not, they are rejected by their parents, who feel as frustrated, tense, and unhappy as the child. In addition, many parents have a sense of shame and guilt. Such attitudes are soon sensed by the child, who then finds himself unable to obtain normal emotional satisfaction and security in his home.²⁸

On the moral side, this inability to think in abstract terms is especially noticeable. The word "amoral" has been coined to describe the condition of a person who behaves contrary to accepted moral standards, not intentionally but because he is unable to grasp the underlying concepts. According to the Binet scale, a child must have a mental age of twelve before he develops even elementary concepts—such as an understanding of "pity," "sympathy," or other single virtues—and a considerably higher mentality seems needed for an adequate understanding of generalized principles of behavior. Since the dull adolescent does not have this degree of mental ability, he cannot do such thinking as is involved in solving a new situation.

²⁷ A. C. Mitchell, "A Study of Social Competence of a Group of Institutionalized Retarded Children," *American Journal of Mental Deficiency*, 60 354-364, 1955.

²⁸ A. E. Heilman, "Parental Adjustment to the Dull Handicapped Child," *American Journal of Mental Deficiency*, 54 556-562, 1950.

The dull adolescent is, then, a nonintellectual person who has great difficulty with any kind of abstract thinking. His school standing is usually average or a little below average in elementary school, but becomes steadily lower thereafter. His social adjustment depends upon his particular experiences, but is more likely to be poor than not—unless he receives special training—because both in school and out his environment makes demands that cannot be met successfully by a person with his intellectual equipment.

Treatment From the first days of compulsory education, schools have had to deal with the problem of what to do with the backward child. For many decades the routine treatment for dull boys was to beat them, dull girls also received punishment but of a less severe nature. The futility of this treatment eventually became evident, and teachers substituted the retardation of slow learners, holding them back for as many years as necessary until they met the academic requirements of each grade. As a result of this policy, a typical third-grade class would contain not only normal eight-year-olds but also dull and defective pupils ranging in age from ten to sixteen. The high school teacher was, however, not called upon to find a solution to the problem; the grade school teachers had retarded the dull pupils until these were over the compulsory age, after which they left school of their own accord.

For the last twenty years investigators have been proving that retardation is not the answer. The proof is of two sorts. The earlier type, in point of time, showed clearly that pupils who repeated grades knew no more at the end of the second or third time through than at the end of the first. That is, retardation had failed in its primary purpose—the better mastery of material that had not been learned earlier. Naturally, there are always a few cases in which an individual pupil does make progress, usually because he is a normal child who was for some reason absent a great deal, or because some inhibiting cause such as inadequate eyesight has been eliminated, or because he had been in violent conflict with his first teacher but liked the second one, and so on. In general, however, the causes which prevented pupils from learning the subject matter the first time were still operative, and the second try was just so much wasted time so far as educational achievement is concerned. The third and fourth attempts were even less productive.

The second objection comes from the mental hygienist and concerns the effect of failure and retardation upon the pupil.²⁹ Nonpromoted pupils have fewer friends, and they are definitely unpopular with their classmates, who are, of course, not their age-mates. In the last elementary school years and in junior high school the average girls are mature and are therefore

²⁹ See, for instance, R. D. Anfinson, "School Progress and Pupil Adjustment," *Elementary School Journal*, 41 507-514, 1941, W. W. Cook, "Some Effects of the Practice of Non-Promotion of Pupils of Low Achievement," National Education Association, Official Report of the 1940 Meeting, pp. 150-154.

inappropriately grouped with immature children. Retarded children are rated low by their teachers on most traits of personality. At least a fourth of them are behavior problems. Not all retarded pupils are mental defectives, although many are. For instance, the distribution of IQ's for 89 pupils who were one year retarded, 42 who were two years retarded, and 8 who had failed of promotion three times was found to be, in comparison with the normal distribution, as indicated in Figure 88. Even in the slowest group

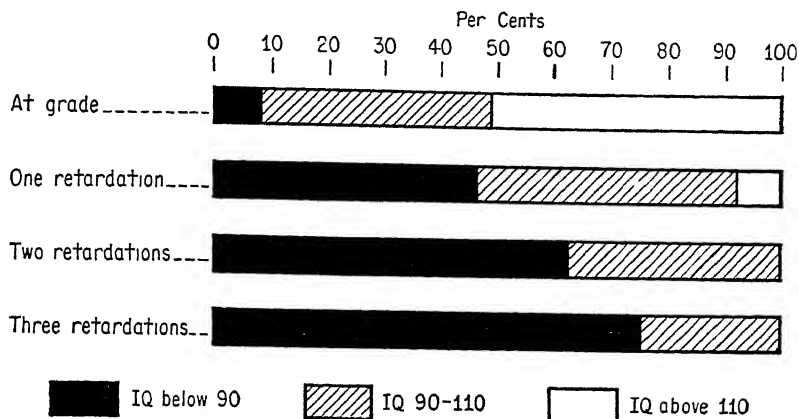


Fig 88 *School Retardation and Intelligence*

Based on figures in A. A. Sandin, *Social and Emotional Adjustment of Regularly Promoted and Nonpromoted Children*, Bureau of Publications, Teachers College, Columbia University, 1944, p. 21

there are some children of normal intelligence, and among those having only one retardation, over half had IQ's above 90. The net result of retardation for most children is, thus, a failure to profit academically and a more serious personal maladjustment than existed earlier.³⁰

During the last decade or more, these facts about the futility of non-promotion have found their way into school policies. In many schools every pupil is promoted every year, regardless of achievement. As a result, the high school teacher now finds in her classes those dull and nonacademic students who would never have reached high school in any earlier period. The situation has precipitated a profound reorganization of work and a change in educational objectives at the high school level in order to make possible a profitable use of time for either average or dull students. Teachers may regret the changes, but American education is dedicated to teaching all the children of all the people, to developing each pupil in any way that is of profit to him, and to preparing the members of each generation for a

³⁰ A. R. Mangus, "Effect of Mental and Educational Retardation on Personality Development of Children," *American Journal of Mental Deficiency*, 55 208-212, 1950

contented and adequate adulthood. This theory includes the dull, who, like the poor, are always with us.

A constructive program for dull adolescents in high school would start by abandoning the traditional curriculum, which is not only too hard but largely irrelevant. A program having several different elements should be substituted with the triple goals of giving training for eventual occupational adequacy, of developing social competence, and of bringing about a comfortable and adequate personal adjustment.³¹ This new curriculum would include five types of work. First, a review of the essential skills from elementary work, with application to common adult problems. Second, there should be immediate preparation for earning one's living. For girls, this phase of training would include such courses as typing, office work, sewing, cooking, domestic service, buying, child care, and so on. For boys, the vocational training would require courses leading to the skilled and semi-skilled trades—bricklaying, carpentry, cement work, tile setting, printing, shoe repairing, upholstering, and the like. A third element in the high school program would give direct preparation for daily life, this training would consist mainly of courses dealing with problems of mental hygiene, social adjustment, and homemaking. Fourth, there would be an adequate amount of training in good uses of leisure time: experience in games, in various avocational forms of handiwork, in reading whatever books or magazines will be read at all, and so on. Finally there would be what, for lack of a better term, might be called "moral training."

It should be noted that in this proposed program there is no inclusion of the subjects typically taught in high school. Some small bits and pieces of the traditional subjects may be added for individual boys or girls who display an interest in them. For instance, one of the writers once spent a half hour or so a day for a semester teaching Latin word roots to a dull adolescent girl who had a curiosity about where words came from and how they were put together. The work was prefaced with stories of Roman life and examination of many pictures. Then about twenty word roots and prefixes were presented, one by one. The first was "port-." The girl looked in the dictionary and was delighted to find such words as "porter," and "portable"—in the meaning of a typewriter like her own that could be carried. She then progressed to "transport," "report," and so on. The girl derived great pleasure from the mere playing with words, she enlarged her vocabulary, and she was overheard telling her friends that she too was learning Latin! This sort of skittering over the surface of a subject is precisely what dull adolescents can do and often like to do. Perhaps the main thing to remember about planning a curriculum for dull pupils is that it should be *different*, not merely a diluted form of what already exists.

³¹ G. O. Johnson, "Providing the Mentally Retarded with Realistic Self-Understanding," *Vocational Guidance Quarterly*, 3: 67-69, 1955.

The dull adolescent needs careful vocational guidance. If left to himself he is likely either to have no objective at all or to select an inappropriate one. Many occupations are closed to him, but he may not realize it. If he makes no vocational plans he is practically certain to drift into dead-end jobs, at best, because he is unprepared for anything else and is not bright enough to pick up skills on the job. He may join the ranks of the unemployed, since his untrained abilities are of too low an order to be easily marketable, or he may enter the criminal ranks because he has little success in earning a living otherwise. If a dull adolescent fixes his imagination upon a vocation that is quite beyond his abilities, he meets with discouragement, failure, disillusionment, and frustration. Early and frequent help in selecting a vocation is therefore essential.

Educational Programs The scope of the programs now in use varies from small but sometimes effective efforts by a few teachers and parents to systematic state-wide plans. Often, a committee surveys the local working scene to determine what kinds of jobs are available and then introduces into the curriculum for the duller children and adolescents the training that is needed for doing the work.³² It is customary to begin the partial segregation of the children as low as the third grade so as to give them basic training in hand dexterity and to withdraw them from the competitive pressure of the usual curriculum. The state schedules are more ambitious, and they are often more concerned with such matters as size of class (fifteen is a common number), certification of teachers, keeping of records, and selection of pupils than with what is to be taught after the class is organized.³³

The department of education in each state usually has a proposed plan for the teaching of dull children. In general, the pupils are to be sorted out by the end of their first school year and put into special classes, in which they will remain. They progress through school somewhat more slowly than other pupils, but since the classes are ungraded, there is no moment of nonpromotion. Often the same teacher moves through the grades with them. Table 19 is a generalized plan for a program that covers all the grades, Table 20 suggests a program for the work in high school only.

It will be noted at once that the academic part of the program is relatively insignificant. In the course of their elementary school days these pupils master sufficient skills in academic subjects to place them in perhaps the fourth grade, but the emphasis upon such work is never strong. Those who are bright enough to reach high school at all may have as high as sixth-grade ability in reading or arithmetic, but almost never anything higher.

³² C. Lovell, "Educational-Occupational Programs for Special Class Girls," *American Journal of Mental Deficiency*, 51:452-455, 1947, and M. M. Birmingham, "Organizing a Special Class for Slow-Learning Children," *Understanding the Child*, 18:140-160, 1949.

³³ See, for instance, R. Graham, "The Illinois Program of Special Education in Public Schools for the Educable Mentally Handicapped Children," *American Journal of Mental Deficiency*, 51:460-466, 1947.

Table 19. A PROPOSED CURRICULUM FOR DULL PUPILS

<i>Chronological Ages</i>	<i>Core of Curriculum</i>	<i>Goals</i>
7-9	The home	Good personal habits, good health, safety, co-ordination, basic academic skills
10-12	The community Beginning of vocational adjustment	Same as above, with addition of elementary shop skills and study of local community
13-15	The world of work	Occupational survey, vocational guidance, specific job skills
16-	Being an adult	Budgeting, home and family, duties as citizen

Based on C J De Prospro, "A Suggested Curriculum for the Mentally Handicapped," in M E Frampton and E D Gall, *Special Education for the Exceptional*, Porter Sargent, 1955, III, 485

Table 20 A PROPOSED PROGRAM FOR SLOW PUPILS IN HIGH SCHOOL

<i>Period</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
1	Physical and mental health, societal interrelationships boys and girls				
2	Woodworking Boys Homemaking girls	Physical edu- cation boys and girls	Woodworking boys Homemaking girls	Physical edu- cation boys and girls	Woodworking boys Homemaking girls
3 (In homeroom)	Group guid- ance boys and girls	Clubs	Group guid- ance boys and girls	Clubs	Group guid- ance boys and girls
4	Remedial read- ing boys and girls	Physical edu- cation boys and girls	Remedial read- ing boys and girls	Physical edu- cation boys and girls	Guidance in reading boys and girls
5	Occupational guidance and training Individual guidance and training in tool subjects				
6	Home economics girls Home mechanics boys				
7	Language development, socialization, free activities for boys and girls				Attendance at Youth Center

From S A Kirk, *et al*, "Educating the Mentally Handicapped in the Secondary Schools," *Illinois Circular*, Series A, No 51, Bulletin no 12, 1951, 53 pp Used by permission of the Superintendent of Public Instruction of the State of Illinois.

The main emphasis from the beginning is upon the acquisition of good personal habits and of adequate muscular skills. In their younger years these pupils have to be given tasks that will develop their powers of co-ordination sufficiently to permit later vocational training. As they progress through school, they spend more and more time in various forms of hand-work. At the high school level they receive vocational training and further help in adjustment to their homes and community. Insofar as they are able to profit by the work, they learn something of elementary social science, this latter being the core of their academic work at this level. Any further work of this kind would do little to improve their academic proficiency and might do much to mar their personalities.

It is essential to the working of such a plan that the pupils should be selected as soon as possible, because they need time to learn, if they are retained too long in the regular classes, they acquire mainly a sense of failure—and then they learn even more slowly. The high school would also do well to sort its entrants and to get its duller students out of the academic classes as soon as may be possible. But it will need to prepare a number of courses that these youngsters can take with profit—and will want to take.

The methods of teaching retarded pupils are much the same at all levels. One sticks to essentials, one demonstrates each step slowly, one avoids theorizing, and one assumes that practically nothing is already known. It takes a special kind of person to teach such children, a really “dedicated” teacher. Also, one who *can* give a simple explanation in terms of everyday experience, as many otherwise capable teachers cannot do. Many a dull child can learn that a half of four ears of corn is two ears of corn, that a half of four inches is two inches, that a half of four slices of bread is two slices, but he cannot take the normal generalizing step that a half of four is two, no matter what objects are being considered. The teacher cannot, therefore, afford to get away from the specific.

Since the present generous promotion policies deliver more and more dull adolescents every year to the high school, there has been much interest in the development of suitable work for them. Some of the programs and classes are planned for retarded youth in the community, after they leave school, and some for inclusion in the high school offerings.³⁴ These plans, whether for use in school or community, emphasize four main topics: physical and mental health, homemaking, social relationships, and occupational training. The authors of such plans have evidently as their objective the education of dull students to be useful, normal individuals, and they make not the slightest effort to turn these dull pupils into scholars.

Outstanding Problems of Dull Adolescents. The first problem of the

³⁴ E. M. Kelly, “Are We Providing Opportunities for the Older Mentally Retarded?” *Exceptional Child*, 21 297–299, 1955; R. W. Purcell, “Community Classes for Retarded Youth,” *Motive*, 1 4–13, 29–30, 1954.

dull boy or girl is the same as the first problem of anyone else—to be loved, to be accepted, to feel secure³⁵ It is an especially difficult matter for him because he has probably already been rejected many times He is probably the un-favorite child of the family and the un-favorite child in the school-room In an effort to find acceptance he often plays with children who are somewhat younger, from whom he can obtain a bit of respect and with whom he can compete with some measure of success When groups of sub-normal adolescents were asked what they worried about or would like to have changed, 80 per cent mentioned items having to do with home and family adjustment Matters of personal or social inadequacy were given by 68 per cent, fear of punishment by 26 per cent, and concern about health by 39 per cent³⁶ These worries are not different from those of other adolescents, these dull boys and girls merely have more of them and have them in intensified form The first thing they need from their school is acceptance

A dull adolescent also needs to be guided into work in which he is successful A solution of this problem consists of more than just telling him that he is destined to be a digger of ditches The main thing is for him to develop a pleasant emotional tone toward those things that he can do best If this can be achieved, no one has to "guide" him The school can make a start on this problem by providing a large and pleasant room, in which the dull adolescent can find both security and success—no matter in what He will undoubtedly work with his hands, but this is no disgrace He should have a chance to try out a number of possible activities and gradually narrow his interest to the one or two things that most appeal to him If a dull pupil can feel pride in work well done, no matter what it is, and can derive emotional satisfaction from doing work that he can do, half his troubles are over.

The dull adolescent's third personal problem is the acquisition of acceptable social and moral behavior. For his own safety, he must have achieved the necessary habits before he leaves school Before him lie the usual stresses and strains incident to adult life He will be called upon to make decisions, and he will not have the mental capacity to reason out for himself what decision he should make Only habits so ingrained as to be an integral part of himself will bring him safely through danger If he leaves high school as a thoroughly happy individual, well adjusted to his social group, equipped with what vocational and academic skills he will need to earn a living, enthusiastic about his work, and well grounded in fundamental habits of honesty, responsibility, and decency, the dull adolescent is hardly more likely to err than the rest of mankind

³⁵ A F Alford, "Mental Health Despite Mental Retardation," *Lancet*, 268 1233-1235, 1955

³⁶ C L Stacey, "Worries of Subnormal Adolescent Girls," *Exceptional Children*, 21, 184-186, 1955

Illustrative Case Studies The four histories below have been selected because they show successful treatment of dull junior high and high school pupils

Natalie was nearly sixteen when she reached high school. She had twice been retarded in the lower grades and still felt unhappy over her failures to be promoted. Since she was a small girl she could pass for fourteen and usually did so. Although her retardations had given her an emotional scar, they had at least deposited her on the high school's doorstep with more maturity of mind than would otherwise have been the case.

Upon entrance to high school Natalie elected a college preparatory course, although she was advised not to because her recorded IQ's on three tests of intelligence were 82, 87, and 91. When the "warning" lists reached the counselor's office in November, Natalie's name appeared on four of them. The counselor sent for the girl to talk over the situation with her and found the child frightened out of what wits she possessed by her own conviction of prospective failure and by her inability to make sense out of her assignments. She was passing her social studies course, and such work as she had handed in in English was good enough but she was badly behind in it. It was arranged that for immediate relief Natalie should drop three of her five courses, should make up her back work in English, and should come to the counselor again before she made out her schedule for the next semester. Natalie received C's in both courses. When she visited the counselor she stated that she wanted to go on with both history and English, but she did not know what else to take. Her out-of-school interests were chiefly confined to sewing, embroidery, crocheting, knitting, and simple forms of painting—coloring, putting geometrical designs onto glass, block-printing cloth, copying Christmas cards, and the like. She showed some of her work to the counselor. It was evident that Natalie was a painstaking, accurate, unimaginative, neat copyist in whatever she did. The counselor enrolled her in a class in design and one in leatherwork. At the end of the second semester Natalie received a B, two C's, and a D. She has continued in high school, taking one or two academic and two or three vocational courses each semester. She gets mostly C's and D's and an occasional B, but she has never failed anything. She is proceeding so slowly that she will need five years to graduate, at which time she will be nearly twenty-one. Her parents are glad to have her keep on in school, and Natalie herself is as young in spirit as she is in mind. In earlier generations Natalie would certainly have been eliminated. Under present conditions she will probably graduate. Her presence in school has harmed no one, and her continued success in such work as she can master at all has given her a sense of adequacy and confidence in her ability to earn her own living. She will probably be a useful citizen in some humble task, and she will be the happier for having the satisfaction of graduating from the local high school—"just like everyone else."

John D. was a boy of nineteen with an IQ of 63 who was having difficulty in adjusting to work outside an institution for defectives, where he had been trained and from which he was on parole but not at the moment living at home. The boy was called in to the counselor for a series of interviews, during which he was given plenty of time to explain, as well as he could, why he was not getting along

as well as had been expected. At about the fifth interview the boy began to discuss his relationship with his mother. He seemed to resent her having placed him in an institution, but at the same time he was constantly making efforts to "please" her. He also felt that she did not adequately appreciate his "good" behavior and did not treat him with the same affection that she had for his brothers and sisters. The interviewer let the boy talk through eleven interviews, merely throwing in a question when the boy seemed unable to proceed under his own power. By that time the interviewer had developed some understanding of the boy's difficulties. In the end, it was suggested to the mother that the boy return home and work at a simple job in the neighborhood, since this arrangement would help to make him feel accepted and secure. The mother, who actually showed a rather good grasp of the situation and an affectionate attitude toward her dull son, was willing to have him come home. This adolescent was not a "problem" as far as his current and past behavior was concerned, but he was piling up resentment against the only people who could help him, and was probably headed for real maladjustment before long. This brief history shows the progressive ability of even a moron to make good use of case work, provided the interviewer goes slowly and presents the concept simply and clearly.³⁷

R. was an adolescent Negro boy who had been arrested for carrying a switchblade knife, although there was no evidence that he had ever used it for anything more lethal than sharpening a pencil. He was at once put on probation and his case turned over to a social worker for guidance. The boy's school history was very poor, because he had never learned to read. Repeated tests produced IQ's ranging from 64 to 117, depending upon how much reading was involved. When R. was thirteen, he had disliked school so much that he began to play truant and had been arrested and sent to a state institution. Upon release, he had become friends with some undesirable boys and was picked up in a raid, although he did not seem to have been more than a spectator.

R.'s mother was a domestic, a hard-working but not very bright woman. His father was an itinerant preacher—a rigid, cold, domineering man, who leaned heavily upon physical discipline in handling his son. Even before the boy entered school, the father began to "prepare" him for learning to read. What the preparation did was to connect in R.'s mind the act of reading and the harsh discipline of his father. In school the child made no trouble, but he could not learn to read. The other boys called him "Big Stupe" and picked on him. After his effort to escape schooling by truancy, he made no better progress in the reading classes of the state institution, although he was by that time seventeen and had been given all kinds of remedial treatment. At that point the family broke up completely: a brother drowned, a sister went into a tuberculosis sanitarium, another sister moved into a brothel, and the mother returned to her own family in another state. The father hired a succession of housekeepers, but he was unable to keep R. at home and the boy was getting completely out of his control.

Since the home was so unsuitable, the social worker had R. returned to

³⁷ A. Sion, "Case Work with an Adolescent Boy of Moron Intelligence," *American Journal of Mental Deficiency*, 57:709-718, 1953.

the state reformatory, where he became a model inmate. A program of therapy was at once instituted to help R. see that he was using his refusal to learn to read as a weapon against his father and that he would not learn to read until he could find some way of reducing his resentment. The father proved unexpectedly co-operative, and a sort of truce between the two was effected. R. is now learning to read with relatively little difficulty.

It is probable that this boy is not feebleminded, but his intellectual level is certainly not higher than low normal. As long as maladjustment was piled on top of his inferior ability, he seemed much duller than he was. He still needs help, but there is now hope that he will eventually be able to make an adequate and normal adjustment to society, although he is likely to need guidance and counseling from time to time throughout his life.³⁸

Gordon was a neighborhood friend of one of the writers. He was a nice, extremely well-mannered boy, but quite dull. In school he was always liked, he was co-operative, he did his best—and at age fifteen he had progressed to the sixth grade, where he finally gave up his efforts to graduate from elementary school. (At the present time, this boy would doubtless have been able to achieve his childhood ambition of graduating.) His real ability and interest lay in the field of music. He sang in a choir, he played the piano by ear, and he was slowly learning to play a violin. The difficulty was that he could not learn to read the score. A piano score was completely beyond him, and his slowness with the violin was not due to lack of technical skill but to slowness of comprehension. One day a music teacher in the neighborhood—a kindly woman to whom he had spontaneously turned for guidance and advice—listened to his violin playing and told him frankly that, although his execution was excellent, he would never be able to compete with the thousands of other violin players in the world, and she advised him to study the oboe. This instrument has a relatively small range of notes, the score is simple, and the technique is not difficult to master, but, since it is not a solo instrument, the most ambitious and talented members of each generation of musicians are inclined to avoid it. But it has a great advantage in that every orchestra has to have at least one oboe player, because the whole orchestra tunes to the oboe. The competition is not severe, and the need is great. So Gordon turned to the oboe. His subsequent life has been commonplace and happy. He lives surrounded by the music he loves, he is a respected and trusted member of a good orchestra, he is happily married, he has never been out of a job—and he remains a dull man whose IQ was probably never above 75.

Summary

The high school contains a small number of extreme deviates at each end of the distribution of intelligence and a considerably larger group of those who vary slightly from the average. The extremely bright and the dull both have their characteristic traits and are distinguishable from the

³⁸ H. M. Newburger, "A Case of Reading Disability," *National Probation and Parole Association Journal*, 1:15-19, 1955.

average and from each other by their physical, social, and emotional development quite as much as by their intellectual deviation. For neither extreme group is the usual high school curriculum appropriate. The brilliant need more and harder work that is presented in the most stimulating manner possible. The dull need less that is academic and more that is immediately applicable to life. Similar but less extensive changes are needed if work is to be adjusted to the needs of those who vary to a lesser degree above or below the average.

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PART THREE

Emotional Development

12

Emotional Growth

There is a wealth of information on emotional development, both normal and abnormal, from infancy to old age. Obviously, not all of this material is of value to the secondary school teacher. It is the authors' intention to summarize in the present section those points which are relevant to everyday association with adolescents. With this object in view, theoretical discussion may be almost entirely omitted. The present section will contain chapters on the general nature of emotions and their normal growth, the nature of conflicts and their possible solutions, the development and measurement of personality, and the description of abnormal emotional states with which a teacher sometimes has to deal.

Nature of Emotions

Human Needs Various psychologists and others have made lists of the basic human needs, basic human urges, or basic human drives. All three phrases refer to the same phenomena, and many people use them interchangeably. It is important to remember that each individual carries within himself, from birth to death, certain inner springs of feeling that may be aroused by any of a number of stimuli, and certain desires that are of such fundamental importance to him that he constantly seeks gratification for them.

The list presented in Table 21 is a combination of several lists by a number of writers. One can see at once that the fundamental needs are of several sorts. Some are clearly physical, others have a less obvious physical basis, if any. Urges of this latter type are often called "drives for ego satisfaction," such as the desires for approval, for self-expression, for love, or for security. Still others arise because man is a social animal and must therefore maintain some kind of personal relationship with his neighbors. He desires friends, praise, loyalty, prestige, and leadership. Drives of this kind are especially strong in the adolescent years, during which more or

Table 21 THE BASIC HUMAN NEEDS

- A Striving for physical security
 - 1 Need to stay alive
 - 2 Need to avoid danger
 - 3 Need to relax
 - 4 Need to recover when ill or injured
- B Striving for sexual satisfaction
- C Striving for love and acceptance
 - 5 Need to be loved
 - 6 Need to feel secure
 - 7 Need to have friends
 - 8 Need to be popular
 - 9 Need to belong to groups
 - 10 Need to please others
 - 11 Need to be praised
- D Striving for status and recognition
 - 12 Need to have and keep possessions
 - 13 Need to be a leader
 - 14 Need to follow a leader
 - 15 Need to control others
 - 16 Need to protect others
 - 17 Need to imitate others
 - 18 Need to have prestige
 - 19 Need to escape blame
 - 20 Need to feel that one is "right"
- E Striving for intellectual life and creativity
 - 21 Need to express oneself
 - 22 Need to seek stimulation
 - 23 Need to think
 - 24 Need to acquire facts
 - 25 Need to relate and interpret facts
 - 26 Need to organize
 - 27 Need to find explanations
- F Striving for realization and improvement of the self
 - 28 Need to grow
 - 29 Need to be normal
 - 30 Need to overcome handicaps
 - 31 Need to work toward a goal
 - 32 Need for independence
 - 33. Need to oppose others
 - 34 Need to resent coercion
 - 35 Need to find oneself

Modified and rearranged from the following sources: A. H. Leighton, "Psychiatric Disorder and Social Environment," *Psychiatry*, 18:267-283, 1955; L. Rathus and L. Metcalf, "An Instrument for Identifying Some Needs of Children," *Educational Research Bulletin*, 24:169-185, 1945; R. N. Sanford, *et al*, *Physique, Personality and Scholarship*, National Research Council, 1943; H. Schacter, *How Personalities Grow*, McKnight & McKnight, 1949, Chap. 2. The exact arrangement is the writers' own.

less re-formation of the ego generally takes place,¹ as the boy or girl finds an acceptable place among his or her peers. Man also has intellectual needs. He wants to know, to understand, to organize, and to interpret. Above all, he likes to think, even though the subject of his thoughts may not always be socially approved.

Even a casual inspection of the list in Table 21 should convince a reader that different people, while sharing to some extent in all these needs, differ enormously among themselves as to the relative strength of the various drives. To one person the mere need to go on living is so strong, and the social drives so weak, that he arranges his life to satisfy this one need and eventually becomes a recluse and a hypochondriac. In another the need to be admired is the most powerful of the lot, while a third is ruled by his need for self-expression. The miser and the millionaire have a strong need to get and keep material possessions, the nun has profound needs to believe in some power outside herself, to follow where others lead, and to protect those weaker than herself, the demagogue's deepest desire is to control others, to lead them, to be worshipped by them, and so on for everyone in the world. Some needs tend to go together harmoniously, but a given person may show a most inharmonious combination of simultaneous desires. Thus, a desire for a hero's prestige may exist beside an intense desire to avoid danger. Most of the reactions one makes between being born and dying are made because they contribute directly or indirectly to the satisfaction of some need or to a restoration of equilibrium after a need has had no adequate outlet for some time, or a drive has long been frustrated.

Although any drive may operate at any age, under circumstances that precipitate it, the needs are not normally of equal importance at all ages. Thus, the need for care and protection is intense in the earliest years and again at the end of life, but—barring emergencies and profound shocks—it is in abeyance during the years of adolescence and adulthood. The desire to learn about things is strong in the early years, but often decreases in proportion as more and more is learned, although the desire to understand phenomena, which starts rather low, increases with age. Perhaps nothing so separates the true scholar from the average man as the continuation throughout the scholar's life of an intense "desire to know." The need to avoid blame increases, probably because children soon learn of the punishment that may be meted out to those who admit their faults. The desire to work toward a goal is almost nonexistent in early childhood, but acquires increasing force with the passage of time. The need to attack others is at first rather high—as any nursery school teacher knows—but children soon learn to substitute other forms of expression mostly verbal, as they become more and more sensitive to social pressures.

¹ See, for instance, M. Sherif and H. Cantril, *The Psychology of Ego-Involvements*, John Wiley & Sons, 1947, Chap. 8.

As these drives develop, they produce more or less tension, which mounts until it becomes so uncomfortable that it has to be discharged in some kind of reaction. Thus when a child who is accustomed to being the focus of parental affection sees his parents pay attention to his newly born brother or sister, he begins to feel uncomfortable because his own ego drives are frustrated, and he pushes himself forward in some way in an effort to recapture his former position. If his behavior brings about the desired results, the tension disappears. Similarly, a young man who has fallen in love generates a good deal of inner tension, which finds normal expression if the object of his affection falls in love with him.

However, life is not so arranged that drives can always be satisfied, either within a short time, or, in some cases, at all. Therefore the tension, instead of being discharged, becomes greater. As long as it continues, the individual is in an emotional state. His ego desires a satisfaction that his environment prevents him from obtaining. Eventually the urge will find some form of expression that satisfies him more or less and gives relief from strain. For instance, a high school boy who has the normal desire for social recognition from his age-mates may find his urge blocked by the poverty and low social standing of his parents, by the inferior school records of older siblings, and by his own small, undernourished body. As day after day goes by without satisfaction of his drive for recognition, his frustration increases. He may get relief by becoming a member of a delinquent group, in which his misdeeds bring him satisfaction for the fundamental urge that is in itself perfectly normal.

The whole matter of conflict and the possible solutions and escapes from the resulting discomfort will be discussed more fully in a later chapter and will not, therefore, receive further attention here.

Nature of an Emotional Experience An emotion may be defined for the specialist in many technical words, but for the layman the familiar, simple definition of an emotion as a "stirred-up state of the entire organism" is probably more understandable. Or, if further definitions make the matter any clearer, an emotion may be called "a response of the entire human being to a stimulus" or an "integrated reaction of the total organism." It should be remembered that an emotion, however defined, is not the same thing as a basic drive or a basic need, it is the reaction that accompanies either the satisfaction or the frustration of a basic need. Thus, an individual has a need to be accepted by his age-mates, to be loved by his intimates, or to express himself in some way. If these drives are fulfilled, he is happy, joyful, contented, or in love. If the drives are frustrated, he is angry, frightened, worried, jealous, anxious, or full of sorrow. The emotions are thus related to the basic drives but are not identical with them.

All emotions have a physical basis or accompaniment, and the curious thing about this physical reaction is that it is nearly the same for all emo-

tions, although some small physiological indications have been found between the internal patterns of response for fear and anger.² The main differences, however, are in intensity. That is, one can be annoyed, irritated, angered, or infuriated, or one can be apprehensive, worried, frightened, or terrified. The changes become more profound, more extensive, and more exhausting with each increase in intensity, but they are basically the same for the same level of disturbance for all emotions. The following description will therefore serve for all.

The entire body participates in the reactions that furnish the basis for accompaniment of an emotional experience. These physical changes are produced through the action of the autonomic nervous system. This is *not* the central nervous system. The two systems exist alongside each other, with little interrelation between them. The nerves of the central nervous system run from the sense organs—eyes, ears, nose, tongue, and skin—to the spinal cord, cerebellum, or brain, whence other nerves run to the skeletal muscles. This system is under voluntary control. It is the system by means of which, for instance, one eats a bowl of cereal, or hits a tennis ball, or pounds a nail, or puts on lipstick. The nerves of the autonomic system run mostly to and from the internal organs and are not under voluntary control. Indeed, so long as this system functions normally, the individual does not even know he has it inside himself. It is the autonomic system that keeps the heart going, the lungs breathing, the stomach and intestines digesting, the kidneys excreting, and the glands of the body manufacturing and delivering their chemicals. Its main distributions are to the following organs, taking them in order from the head downward: the eyes (not to open or close them, but to dilate the pupil), the tear glands, the mucous membrane of the nose and mouth, the salivary glands in the mouth, the parotid glands, the larynx, the heart, the lungs, the stomach, the liver, the pancreas, the intestines, the kidneys, the adrenal glands, the bladder, the colon, and the genitals, there are connections also with the main blood vessels and with the sweat glands in the skin.

A diagram of these connections appears in Figure 89. As indicated, the system has three main divisions, the cranial (shown in the figure by the nerves at the left and top), the sympathetic (shown at the right), and the sacral (shown at the left and bottom). The first and the last work together in direct opposition to the sympathetic branch and are therefore usually called, collectively, the parasympathetic branch. Nerves from both sympathetic and parasympathetic branches run to all the vital organs enumerated above. The function of the sympathetic branch of the autonomic system is to inhibit digestion, to constrict the blood vessels, to dilate the pupil of the eye and the bronchioles of the lungs, to make the hair stand

² A. F. Az, "The Physiological Differentiation between Fear and Anger in Humans," *Psychosomatic Medicine*, 15:433-442, 1953.

erect, to release blood sugar from the liver, to stimulate the secretion of sweat, to release adrenalin from the adrenal glands, to increase the blood pressure and pulse, and to check the flow of saliva. The action of the para-

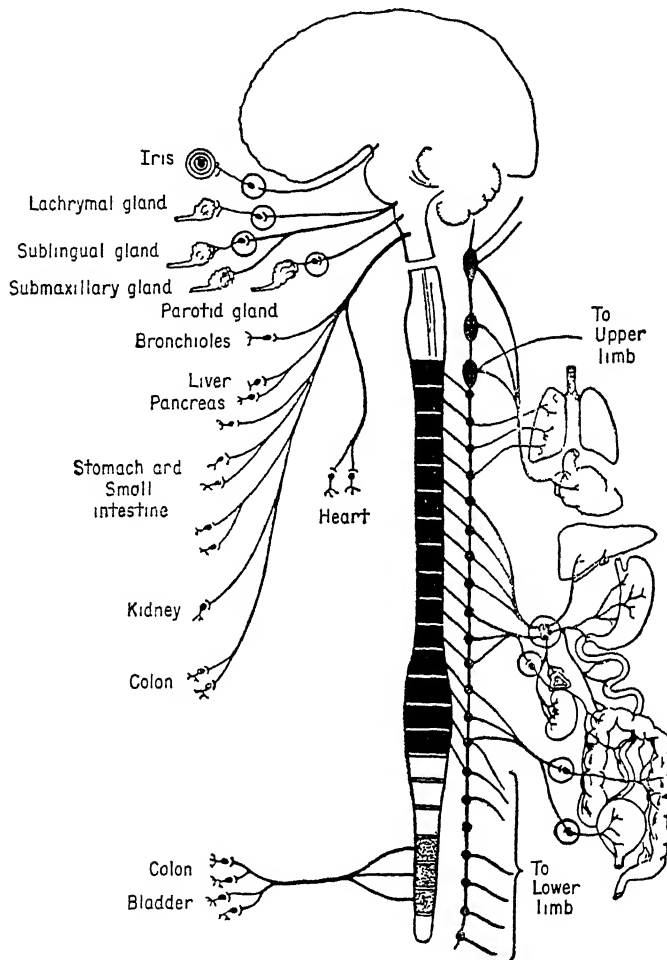


Fig 89 *The Autonomic Nervous System*

C. H. Best and N. B. Taylor, *The Physiological Basis of Medical Practice*, The Williams & Wilkins Co., 1939, p. 1520. Used by permission of the publisher.

sympathetic branch is exactly the opposite. These nerves make the heart beat more slowly, constrict the pupil of the eye, increase salivation, increase stomach and intestinal action, dilate the blood vessels, reduce the blood pressure, and stop the secretions from the adrenal and sweat glands. During normal periods the two divisions are evenly balanced, but when an emotion

develops, the sympathetic branch is in the ascendancy, then, as the emotion subsides, the parasympathetic branch becomes stronger until the normal balance is restored

This arrangement of nerves that operate during an emotion explains some of the characteristics of an emotional experience. For instance, when one is insulted, he cannot help *feeling* angry, because the emotion is served by nerves not under his control, although he can refrain from answering or from fighting, because the nerves that run to his speech mechanism and the muscles in his arms and legs are under his control. It is a fertile source of maladjustment that people can thus refuse an emotion its normal outlet, the feeling is so powerful that, if one outlet is blocked, it will find another and perhaps even less desirable one. A strong emotion often precipitates incidental physical symptoms, such as the nausea and diarrhea that many athletes experience for hours before a competition, or the dead faint of a person who is terribly frightened, or the breathlessness, blushing, and perspiration of a young man trying to propose. After an emotion has passed, the individual is suddenly exhausted because of the upheaval within his fundamental processes and is likely to drop off to sleep wherever he is, as is dramatically shown in the pictures of soldiers released from duty who go instantly to sleep before they have time enough to move themselves out of danger.

As soon as one begins to experience an emotion, the physiological changes start. An almost immediate effect is the secretion of adrenalin by the adrenal glands. The adrenalin is discharged by the glands into the blood stream, by which it is carried over the entire body within a few seconds. Its action upon different bodily structures is varied. It acts upon the stomach to retard the normal digestive processes. In extreme cases the peristalsis of the stomach and intestines completely ceases. During an emotion only about 15 per cent of the normal amount of gastric juice is secreted by the stomach. The salivary glands cease functioning almost entirely. The emotion acts upon the liver, causing this organ to discharge into the blood stream the sugar that is normally stored in it³. This sugar is carried by the blood stream to the muscles. It is the "food" which the muscles require for their contractions. The adrenalin further acts upon the small muscles controlling the amount of air that can be taken into the lungs. These muscles become relaxed so that the person who is angry breathes in more oxygen and discharges more carbon dioxide than he normally does. The breathing of the person becomes more rapid and somewhat irregular. The adrenalin also acts upon the blood vessels which supply the abdominal organs, driving the blood from the abdomen into the muscles, nervous system, and lungs. Another effect is a change in the composition of the blood.

³ See S. Cobb, *Emotions and Clinical Medicine*, W. W. Norton & Company, 1950, Chap. 5.

those chemicals that make it coagulate more quickly increase. The adrenalin directly affects the heart muscles, and causes the heart to beat more rapidly and with more power. As a result of this change, the blood pressure rises for the duration of the emotion. It is the driving of the blood from the viscera into the muscles and to the surface of the body generally that produces the redness of the angry person's face and the general feeling of warmth that he experiences. The adrenalin also causes the sweat glands in the skin to function, thus producing dampness in the palms of the hands and on the face. Tears, sometimes quite inappropriate to the emotion, often flow because of the stimulation of the lachrymal glands. There may be loss of bladder or colon control, and, in the case of men and boys, sudden erections that have no sensible relation to the emotion being felt. The muscles which control the skeleton, because they are supplied with an extra allowance of blood sugar, often contract until they quiver with sheer tenseness. During an emotion the individual has actually a greater strength and a greater endurance than during his usual calm state, but he does not have the control over his muscles that he has when he is not emotionally disturbed. Thus in an actual fight between two people of normally equal muscular development, one of whom is extremely angry and the other of whom is quite calm, the angry fighter has the greater strength and is likely to damage the other seriously if he ever succeeds in landing a blow, but his muscular control is often so poor that he cannot hit his opponent at all, while the unemotional opponent continues to land much lighter blows whenever he wishes to do so.

It should be clear that the internal changes are preparation for some kind of violent action, such as running away or fighting. If the excess adrenalin and sugar are not used, if the generated readiness to act is not discharged in some way, pathological developments may follow. It is not necessary that the "natural" form of discharge be used. Any activity that uses up the excess glucose in the muscles is as good as any other. The discharge may also take the form of words or even thoughts. If the individual's emotional steam is not released, however, it will perpetuate the seething inside him, will precipitate conflicts, and will eventually discharge itself through abnormal channels.

The Life History of Three Major Emotions

Emotions appear early in life. From birth, babies show a general state of excitement when they are stimulated. Their main response is an undifferentiated howling and thrashing about. Presently, however, the onlooker can tell whether the baby finds a given stimulation pleasant or unpleasant. Further differentiation soon occurs, and the emotions of fear, rage, excitement, and joy become recognizable. The child of two has added

jealousy, love, and hate to his repertoire. By the time he enters school, he has a full emotional equipment. The differentiation of the generalized excitement seen in infancy into a number of emotional states thus takes place long before adolescence.

At different ages, individuals are susceptible to different stimuli. At any one age they fail to notice some to which they have previously reacted, and they become aware of others to which they have heretofore been indifferent. It may, for instance, suddenly strike a third-grade child that school-work is competitive, and this new idea may generate in him a feeling of shame because he has thus far puttered happily about at the bottom of the class. Other stimuli, once powerful, may lose their meaning or may arouse a different emotion. Thus the ten-year-old boy thinks it is funny to pull out someone's chair just as that person is about to sit down in it, the adolescent scorns such behavior as a "kid trick," and the adult is fearful of possible injuries to the coccyx. The expression of the emotion also varies with age, the change being mostly away from direct, obvious, violent behavior and toward subtlety. The jealous four-year-old openly pushes his rival out of the way and seizes the center of the stage, but the jealous woman of forty leaves the spotlight on her rival while she indirectly and with seeming innocence makes her appear ridiculous.

The type of presentation in the following section brings into relief the effect of age and experience upon emotional behavior. The general background against which emotions develop has already been discussed, but the particular situations that thwart the drives and thus produce frustration differ from one age level to another. In most recent work on the emotions the tendency has been toward synthesis rather than toward analysis. However, it seems to the writers that the study of single emotions has certain values in helping a student to see the underlying mechanisms and to understand why the frustration of a basic drive should be disrupting. Naturally, one should not become so intent upon specific stimuli and reactions that he loses sight of the total individual or the total environment. For purposes of clarity and emphasis, therefore, the analytical approach has been preserved, with the expectation that the insertion of many case studies and the later discussions of frustrations, conflicts, and problems will afford the material necessary for an adequate synthesis and application of the treatment to life situations.

To the person who becomes angry or frightened, the whole experience comes in one piece, but for purposes of clarity and understanding, one can divide such an episode into three parts: the exciting stimulus that precipitated the anger or fear, the period of emotional disturbance, and the response made, by means of which the pressure built up during the emotion is discharged. The second of these somewhat artificial diversions consists of the internal adjustments described above, which vary mainly with the

body's ability to react. A teacher needs to understand the nature of these internal changes, but there is nothing that she or anyone else can do about them. There are, however, great changes from birth to death in the stimuli that precipitate emotional episodes and in the reactions that are made. A biography of an emotion must, therefore, concern itself primarily with the causes and effects of emotional upheaval.

A "life history" of each possible emotion would result in far too long a discussion, even if there were adequate data for such a treatment. Moreover, there is no accepted list of emotions. Some psychologists list three, four, or five emotions, others admit about a dozen, and there are a few who enumerate even more. The exact number of emotions need not be determined so far as the forthcoming treatment is concerned. The writers would be inclined to group the emotions into three types, depending upon the kind of behavior they lead to, and to list the emotions as follows: anger, jealousy, hatred, and hostility as emotional states of an aggressive character, fear, worry, dread, sorrow, embarrassment, regret, and disgust as inhibitory states, and love, affection, happiness, excitement, and pleasure as joyous states. One emotion from each group has been selected for discussion in some detail. The treatment given could, however, be extended to any other emotion concerning which sufficient evidence was available. The main thing for teachers to realize is that, although internal changes during an emotion vary only in intensity, the stimuli for and reactions to emotional stimulation have typical stages of development that can be traced just as surely as the stages of intellectual growth. Illustrative material from three emotions should make this point sufficiently clear.

Emotional States Leading to Aggressive Behavior. In this group of emotions, anger is the one selected for discussion, partly because it is more frequently and easily aroused than the others and partly because there is a considerable body of literature about it. The situations that produce anger will first be considered.

The baby becomes angry if he is not fed when hungry, if his soiled clothes are not replaced by clean, dry ones, or if his freedom of movement is restricted. Small children become angry if someone takes a toy away from them. There are also many outbursts over the establishment of toilet routines. And they become annoyed if some occupation is interrupted, especially if they must now do something that holds no interest for them.

For adolescents the causes of anger are quite different. They have been studied by means of "anger diaries"—records kept over a period of time concerning the causes of anger, the reactions made, and sometimes the duration of the emotion.

A few typical stimuli that aroused anger in adolescents are listed, in their own words, on the page opposite.

- 1 My mother makes me get home before midnight.
- 2 My boy friend ran his fingers through my hair and made me look a mess
- 3 My father's fraternity turned me down after giving me a big rush
- 4 My girl said she'd go to the movies with me, but when I called for her she'd already gone with someone else
- 5 My math teacher calls on me by saying, "Now let's hear from our football hero" She knows I can't answer her silly questions
- 6 I postponed a date to oblige a girl friend who had two men coming on the same evening, and she hung onto the really nice guy all the time and left me with a poor stick
- 7 I paid \$70 for my dress and the shop assured me it was an exclusive model, but when I got to the dance, there was another girl with a dress just like mine.
- 8 I tripped over the last hurdle and everyone in the stands just laughed
9. My French teacher makes me try to pronounce words with nasals in them and when I do the kids laugh, and when I won't he bawls me out.
- 10 My brother took the new sweater I was going to wear to the school picnic, and I had to go in my old one.

Another investigator asked a group of college women to keep both anger and fear diaries for a week, writing down emotional episodes as soon as possible after their occurrence. The students also indicated in each instance whether the precipitating situations were actually present or were something recalled from the past or anticipated for the future. The average number of anger reactions a week per student was 16, with a range from a completely pacific 0 to a bellicose 42. The fears—to be discussed further in the next section—averaged 12, with a range from 2 to 36. The number of episodes of each type correlated with each other with a coefficient of 0.72, suggesting that there is an underlying degree of emotionality that affects all reactions, that is, those who were most often angry or afraid were also most frequently excited, happy, in love, jealous, or melancholy, while those who lacked fear or anger also lacked strong expressions of other emotions. The situations precipitating fear or anger differed in one important respect from each other: feared situations were mostly in the future, a few in the present, and almost none in the past—70, 27, and 3 per cent, respectively. Almost all situations precipitating anger were in the present—94 per cent of them—with 3 per cent in the past and 3 per cent in anticipated situations. For anger, the situations may be classified as follows:

	<i>Per Cent</i>
Those arising from frustrated plans	52
Those leading to loss of prestige	21
Those arising from schoolwork	13
Those arising from family relationships	10
Those arising from abstract problems	4

The thwarted plan and the loss of status contribute nearly three fourths of the situations that led to anger. When plans were frustrated, the agent was a person in 46 per cent of the episodes, an institutional factor—such as rules and regulations, red tape, or “schedules”—in 23 per cent, personal inadequacy in 16 per cent, and the perversity of things, accident, or chance in 15 per cent.⁴

Causes of adult anger have hardly been investigated, but what evidence there is suggests some continuance of childish irritation at objects that refuse to function and adolescent sensitivity to social slights, real or imagined. A new type of stimulus is, however, fairly frequent. Adults become angry over such matters as the failure of an able man to be promoted or the interference of government agencies in their business enterprises.

The three levels of development may be summarized as follows. In early childhood, anger comes most frequently from conflicts over playthings or daily routine. In adolescence, the causes of anger are primarily social. The individual gets into a situation in which he feels himself embarrassed, ridiculous, offended, or annoyed. The adult also becomes angry if his work or leisure is too much interfered with, and he is inclined to feel concerned over abstract justice or social conditions. It is small wonder that the child, the adolescent, and the adult sometimes fail to understand one another's reaction to the same situation.

One of the writers is reminded of an episode at a neighbor's house during her childhood. The sixteen-year-old boy of the family had asked his history teacher—a man of about fifty—to the house for dinner. As the hour for the teacher's arrival grew near, the boy called his ten-year-old sister, saw that she put on a clean dress, lectured her on being a lady, parked her in the swing on the front porch, and ordered her to sit there and stay clean—if she could. The lad was in his room putting the finishing touches on his own toilet, when his small sister spied the teacher approaching the house. Being on her good behavior, the child went to meet him and—because she wanted to be especially nice—asked him to come in through the back door and kitchen, on the principle that this method of entrance was more informal and friendly. Both the mother of the family and the teacher were a bit surprised to come face to face in a small back hall generously cluttered with overcoats and rubbers, but neither was especially disturbed. The adolescent boy, however, was furious. For him the evening was ruined because the mores had been so outraged. He scolded his sister until she dissolved in tears and his mother intervened. The two children were finally separated, but the boy remained angry and sullen, especially after the mother refused to punish her small daughter when the latter had had only the best of intentions. The little girl, who adored her big brother, was too heartbroken to eat, so she sat at the table, alternately sniveling and bursting out with angry words of self-defense. The adults

⁴ A. Anastasi, N. Cohen, and D. Spatz, “A Study of Fear and Anger in College Students through the Controlled Diary Method,” *Journal of Genetic Psychology*, 73:243–249, 1948.

tried to act as if nothing had happened, but without conspicuous success. As the dinner party continued, the parents became greatly annoyed at their children's behavior, and the teacher became embarrassed at their annoyance. By the end of the meal the teacher was angry at the parents for making him uncomfortable, the parents were angry at the children, and the children were angry at each other.

The reactions made when one is angry also show a development. The small baby becomes quite rigid, he screams and beats the air with his arms and legs. This is his only reaction, probably because his mental and muscular development is so slight that other reactions are not possible. The preschool child also cries, screams, and becomes stiff, in addition, he kicks, strikes, bites, scratches, stamps his feet, jumps up and down or throws himself on the floor. Elementary school children, especially boys, make a direct, physical attack upon whoever has angered them. By adolescence the responses of either leaving the scene or substituting a verbal for a physical attack have become predominant.⁵ There is little actual violence, although there is frequent reference to the deliberate suppression of such behavior. Instead, the boy or girl tends to substitute the reactions of pacing the room, being generally restless, going out for a walk, or indulging in some violent exercise as a means of working off emotion. Some slight degree of subtlety is shown by those who refuse to speak to the people who have made them angry or hurt their feelings. Finally, there is a persistence of infantile behavior in the form of stamping the feet, or kicking things, on the part of the boys, and of crying, on the part of the girls. Among adults, the verbal responses have almost completely taken the place of all other forms, although women still cry and men still kick things. It should also be noted that the younger the individual, the more immediate is the release of emotional tension. Direct release is perhaps best physiologically for the person who is under tension, indirect release the next best, and suppression—with its storing up of tensions—quite undesirable at any age.

The duration of the anger also varies somewhat with the age of the individual. Among preschool children, the outbursts last less than five minutes. For college students the average period is fifteen minutes, and the total range from one minute to forty-eight hours. The number of anger experiences a week does not seem to vary greatly with age, the main differences are to be found in the situations causing anger, in the responses made, and in the duration of the responses.

Jealousy has been studied less than anger, but a few investigations have brought out certain points about its nature and causation. One writer classifies the types of jealousy as being intellectual, possessive, and sexual.⁶

⁵ A. Gesell, F. L. Ilg, and L. B. Ames, *Youth: The Years from Ten to Sixteen*, Harper & Brothers, 1956, pp. 338-341.

⁶ B. Sokoloff, *Jealousy: A Psychiatric Study*, Howell, Soskin, Publishers, Inc., 1947, p. 54.

The emotion seems in general to arise whenever an individual feels himself threatened by an actual or supposed loss of affection or prestige. The reactions into which one is driven may be positive and consist of aggression toward or competition with the person causing the emotion, or they may be negative and consist of withdrawal from competition, hero worship, repression, or masochism.⁷ The former is seen in the child who strikes his baby brother, and the latter in the adolescent who attaches himself to more successful people by making heroes of them, thus avoiding competition, since one does not even try to compete with one's heroes.

Emotions Leading to Inhibitory or Defensive Behavior The second of the three most powerful emotions is fear, which seems to be present from birth. The typical reactions are paling, trembling, perspiring, becoming rigid, panting, and—subsequently or coincidentally—running away. These reactions may become attached to practically any stimulus and are not necessarily attached to more than a few. Most of the things a human being fears he has learned to be afraid of.

In recent decades various efforts have been made, through the use of questionnaires and tests, to obtain information as to the fears and other emotional attitudes of normal children and adolescents. Below is a list of the worries mentioned most frequently by fifth- and sixth-grade children, whose ages would be roughly from ten to thirteen.⁸ They were afraid of or worried about such things as these

Failing a test in school	Being hurt by knives, guns, poison, fire, floods
Father or mother being sick	
Father or mother working too hard	Being in an accident, holdup, burglary, or fight
Getting a bad report card	
Father losing his job	Being sick, suffering, choking, dying
Being late to school	Losing money while doing an errand
Being left in the dark	Losing one's fountain pen
Being hurt by animals	Losing one's friends

Most high school pupils continue to show a number of typical childish fears, but new sources of worry appear because they are subject to many new pressures and drives. Adolescents concentrate upon such anxieties as the following: fear of school examinations, automobile accidents, and disease, worry over inadequate funds, lack of ability, getting a job, loss of work by parents, or appearance of the home, fear of being sinful, of being led astray by bad companions; worry over being unpopular or unsuccessful, over hurting other people's feelings, over being shy, self-conscious, dull, or lonely, over being tempted to cheat, over losing one's religious beliefs, over

⁷ H. Vollmer, "Jealousy in Children," *American Journal of Orthopsychiatry*, 16:660-671, 1946.

⁸ See, for instance, J. B. Winker, "Age Trends and Sex Differences in the Wishes, Identifications, Activities, and Fears of Children," *Child Development*, 20:191-200, 1949.

making a bad impression upon others, over being unable to concentrate, fear of growing up, of blushing, of being socially incompetent, of having sexual experiences, of masturbating, of daydreaming, of having crushes, of disappointing one's parents, concern over having pretty clothes and lots of friends, anxiety about being different from others, being teased or scolded, being treated unfairly, being too closely watched, being laughed at, or being a failure. These myriad anxieties may be grouped under six main heads: worries related to the problem of emancipation from home, those related to maintenance of social status, those concerned with educational adjustment, those concerned with vocational selection, those related to problems of sex, and those that offer a threat to existence.⁹

In the "fear" diaries referred to on pages 267-268, the situation that precipitated the reaction in 40 per cent of the cases was the likelihood of failure (or of a low mark) in schoolwork, the prospect of a loss of status in 31 per cent, the possibility of illness or accident in 17 per cent, and the probability of conflict with the family in 6 per cent. Perhaps some worry about schoolwork is inevitable, but these figures seem a little high.

One interesting study traces a few specific fears from either grade 6 or grade 8 through grade 12.¹⁰ A few sample results appear in Table 22.

In the adult years, new worries arise. Concern about money and job security lead all the others, then come health and appearance. Somewhat below these, but still frequent, come business failure, political convictions, religious convictions, family and marital adjustments, lack of confidence, surrender of cherished ambitions, and sexual morality.¹¹ These are fears of a different type from those in childhood, but some of them are quite like worries that appear during adolescence.

Fears are created by the physical and social world as it exists. Certain typical adult worries could be greatly reduced if not eliminated by a different organization of society that would provide for more even distribution of wealth, a lessening of class consciousness, an elimination of prejudice, a better guarantee of steady work, and a greater security against a destitute old age. The universality of such fears is shown by the readiness with which people accept any government that they hope will relieve them of these anxieties. Man is well on his way to conquering the physical forces in the world, but it remains to be seen whether or not he can control those that are social or emotional.

⁹ See, for instance, H. Angelino and C. L. Shedd, "Shifts in the Content of Fears and Worries Relative to Chronological Age," *Proceedings of the Oklahoma Academy of Sciences*, 34:180-186, 1953; R. L. Brown, "These High School Fears and Satisfaction," *Understanding the Child*, 23:74-76, 1954; Gesell, Ilg, and Ames, *op. cit.*, pp. 341-343.

¹⁰ C. M. Tryon, *University of California Inventory: Social and Emotional Adjustment* (Revised Form), 1939.

¹¹ R. A. Dykman, E. K. Heimann, and W. A. Kerr, "Lifetime Worry Patterns of Three Diverse Adult Culture Groups," *Journal of Social Psychology*, 35:91-100, 1952.

Table 22 CHANGES IN PATTERNS OF FEARS

		<i>Grades</i>						
		6	7	8	9	10	11	12
Noises in the night	Boys	31	11	7	4	6	3	3
	Girls	35	25	22	18	18	24	17
Walking along a cliff edge	Boys	35	35	32	20	23	18	23
	Girls	47	47	43	33	33	43	33
Snakes	Boys	38	27	21	18	24	24	18
	Girls	64	58	50	56	51	49	53
Being alone in house at night	Boys			10	7	6	3	0
	Girls			26	26	12	15	18
Earthquakes	Boys			13	10	11	11	6
	Girls			49	31	28	42	47
Going down a dark street	Boys			11	6	3	3	3
	Girls			19	15	17	24	31
Being followed on the street	Boys			23	11	14	15	10
	Girls			60	47	39	61	49

These figures are based on C. M. Tryon, *University of California Inventory: Social and Emotional Adjustment* (Revised Form), 1939.

The reactions to fear are not varied. The main behavior is a rigidity of the entire body and an intense pallor. The running-away behavior is usually secondary to the immobility. The reactions shown by persons of all ages are in large measure variations, more or less subtle, upon these two central patterns. The baby grows rigid and pale, he is helpless to do anything else. Small children often run away, preferably toward a protector. As children grow older and their intellectual abilities mature, they discover that the mores do not approve of cowardice, so they learn to do their running away before the stimulus appears, that is, they learn to avoid situations that may cause anxiety. Thus the pupil who is afraid to address the class in his oral English work develops a spurious toothache on the day he expects his turn to come. He is running away just as clearly as if he had fled from the classroom, only in a less conspicuous manner. The adult who is afraid has usually better control than the child or adolescent, but a protracted strain will break him down to the childish levels of rigidity, crying, and running away. Thus many a man collapses from anxiety while his young wife is enduring a twenty-four-hour labor at the birth of their first child. Fear reactions are rarely converted into secondary forms, as anger responses are. They are controlled better as a person grows older,

and they are avoided whenever possible, but they are always lurking behind the individual's defenses, presumably because of their close relation to the most fundamental of all needs—the need to stay alive

Recent wars have demonstrated the universality of fear. Even young, healthy, vigorous men who in civilian life would have been ashamed to admit their fright spoke simply and honestly to one another of their panic. Modern warfare is so frightful that the human spirit cannot find in it enough uplift to cover the agonizing fear that gripped every man sometimes and some men frequently. In order to keep normal men as free as possible from panic, the Army during World War II emphasized the treatment of fear as one topic in its indoctrination. The principles set forth boiled down to a number of simple rules that are as useful in peace as in war:

1 Learn to recognize the early symptoms of fear, so that you know when you are becoming frightened

2 Don't be ashamed of your fear. Better men than you have known it

3 Think objectively about the situations in which you may become frightened and plan in advance what you can do. If you have work to do, keep your mind on it, if the time must be spent in waiting, decide what you will do or think about to fill the time

4. Talk to your friends sometimes about your anxieties. Don't try to keep your fears a secret.

5 Remember always that other men are depending on you. If you blow up, they're sunk

6 Have all the fun you can, as long as you can, up to the last split second. Nothing keeps panic away from you and your buddies as successfully as a sense of humor

7 Although you admit your fear to your intimates, because it is so contagious try not to show it publicly¹²

These rules may well be applied to situations in ordinary civilian life.

Suppose, for instance, that you are a thirty-year-old woman with two small children and that you are desperately afraid of thunderstorms. You talk the situation over with your husband, instead of trying to suppress it, you ask him to help you, if he is at home when a storm comes, and you plan activities to keep yourself busy. One afternoon the thunder begins to roll and the lightning to crackle, but you are prepared. You set about making a complicated cake—the chore decided upon in advance—that requires your full attention. You carefully suppress the evidences of your fear because you do not want to pass this agony on to your children. Your husband does his bit by telling funny stories, exchanging banter with you, lighting your cigarettes, distracting the children's attention at critical moments—and suddenly the storm is over, and you have been only mildly alarmed.

¹² Condensed and adapted from J. Dollard, *Victory over Fear*, Yale University Press, 1944, 64 pp

Fears have a tendency to entrench themselves firmly and to spread over an individual's entire life, distorting and circumscribing it, as in the story below

Dorcus was a girl of eighteen who had been sick during much of her childhood. She had not been able to go to school although she sometimes played quiet games with other children after school hours or on rainy Saturdays. In the course of her first fifteen years of life Dorcus had to have several operations, for all of which she was given ether. With each successive operation it became harder and harder for her to take the anesthetic, and on the last occasion she had to be held down on the table by main force. As long as Dorcus continued to live quietly at home there seemed to be no aftereffects of the trauma she suffered at each operation. Soon after her entrance to high school, however, she began to show some odd reactions. She would not take the subway from her home to the school—the quickest means of transportation, she would not ride in the school elevators, she would not use the locker assigned to her, and she fought frantically against any hand put upon her either during her physical examination or in games. Her fear of being compelled into a situation in which she might be hurt was so intense that she shook off, in obvious terror, even such slight contacts as a guiding touch on her arm, and her claustrophobia was so intense that she could not bear to put even inanimate objects such as books and papers into a locker where they would be unable to get out. Elevators and subways raised the claustrophobia to an unbearable pitch. After a short time in high school, Dorcus was sent to the school psychologist, who was not long in discovering the connection between the girl's history of operations and her fear. Dorcus explained readily that when she went under ether she had always dreamed that she was in a coffin and buried alive. She had always awakened in panic which presently transferred itself to the moment at which the dream began as she went under ether, and caused her to fight madly from the first whiff until she was completely unconscious. Her revolt against physical restraint was, of course, a reaction to a stimulus that recurred, although in greatly attenuated form, whenever the slightest force was used to push her into a course of action, or whenever she found herself in a small, enclosed space. This girl's fear was hard to cure because it had a basis in a series of severe and repeated emotional shocks. Dorcus eventually made a fair recovery, largely because she was a very intelligent girl and was able to develop a good understanding of the situation. She has learned to ride in subway trains and elevators without more than an occasional qualm, and she can even go through tunnels under rivers, although she still has to grit her teeth to remain quiet. Two or three rather torrid love affairs have taught her to like being touched. Once in a while, in the office of a dentist or a doctor, she still shows a tendency to hysteria if the nurse tries to hold her hands or to restrain her in any way while the doctor is giving her a treatment, but the outbursts are relatively rare and are not nearly as severe as they were earlier. This girl's history is instructive in showing how a fear can condition an individual's entire adjustment to society. Dorcus was rapidly becoming an outcast among her age-mates because of her peculiarities, which seemed to them to be merely silly. If she had not been helped she could easily have become the most unpopular girl in the school.

Fear is destructive. Its only value is to prevent one from doing something that is dangerous or unwise. It is therefore useful for survival in moments of actual physical danger under primitive conditions. In a modern environment, however, the reactions may lead to unnecessary injury or death, as in a theater fire when the running-away response may be the only cause of fatalities. In general, worry only interferes with accomplishment and leads to maladjustment. The conquest of unnecessary fear has become an important problem of mental hygiene.

Emotions Leading to Joyous Behavior The third of the fundamental emotions is love. As in the case of both fear and anger, there is a definite development from infancy to adulthood in the stimuli which cause this emotion. It is probable that the bodily background also changes with age, since children are undeveloped sexually and since individuals beyond middle age have more or less lost their sexual vigor. Because of the physiological changes at puberty, the bodily turmoil into which love precipitates the adolescent is both profound and unexpected. He has already experienced the emotion which in childhood passes for love, but he has not had the same internal adjustment. Whereas a small child may be just as angry as an adolescent, he is not normally in love in just the same way.

In the Freudian literature one finds much concerning the development of erotic interest, with special emphasis upon the importance of the earliest stages of growth. Five more or less distinct stages are recognized: the oral, the anal, the Oedipal, the latent, and the genital. The earliest period continues from birth till the time the child stops nursing. It is a period of dependence, during which the satisfaction of all the baby's needs comes from his mother. When she nurses or fondles him, he reacts by laughing and crowing. Since hunger is his chief driving force, nursing is his chief joy, and his mouth is the chief area through which pleasure comes—hence the name of this stage. During the second and third years of life, the child is being trained to use the toilet, and his erotic interests become attached to these activities. Most children get pleasure from their eliminative processes and show a desire to play with the products. This anal stage is of relatively short duration. During both of the two earliest periods the child's interest is focused on himself. Between, roughly, the ages of four and six, he passes through the Oedipal state. The name is derived from a Greek myth of a boy who unknowingly killed his father and married his mother. During this period the little girl "falls in love" with her father and becomes hostile toward her mother, and the little boy "falls in love" with his mother and becomes jealous of his father. The resulting Oedipus complex is normally resolved before or soon after the entrance to school, partly by the interest in age-mates and partly by association with a greater number of adults. The child who has emerged from these three lowest levels now enters a period of latency during which his love life is quiescent.

and he is concerned chiefly with working out a satisfactory relationship with his peers and with gaining control over his immediate environment and over himself. With adolescence the genital stage begins¹³

It should be pointed out that thus far there is relatively little objective proof of the above theory of development. For instance, breast-fed babies, who should derive more satisfaction than bottle-fed babies, do not seem to be any better adjusted in later life than the latter¹⁴. Premature or delayed toilet training has not been shown to have a measurable effect upon subsequent personality. All one can say at the present time is that the existence of these levels, as based upon observations, may be taken for granted, but that their significance cannot be, nor can one assume that they form a *proven* series of the expression taken by an underlying sexual drive. The concept has, however, been of value in clinical work and in understanding certain intergroup relationships. It has also permeated modern thought and speech. To date, however, no one can offer objective proof of its accuracy, and perhaps such proof will never be possible, even though the theory be entirely correct. In any case, one should know what the Freudian ideas in this respect are and should use the concepts whenever they seem to shed light upon human problems.

In psychological literature the person or thing that inspires the emotion of love has been termed the "love-object." The love-objects that are most powerful in arousing the emotion vary with age, just as the situations arousing either fear or anger also vary. The first love-object for babies of either sex is undoubtedly the mother, or the person who looks after them. The mother usually remains the exclusive love-object during the first year of life. Later on, she may be displaced by the father or she and the father may be about equally potent in arousing the child's affections. A mother is not usually displaced in the affection of her sons although she is quite often superseded by the father in the affection of her daughter. The reason for this situation appears to be partly that many women are actually more attached to their sons than to their daughters and partly that many men are unwilling to display their affection toward their sons for fear the boys will become sissies. By the time a son is perhaps two years old the average father is unwilling to fondle or kiss him or otherwise display a love which may be quite as deep as that which he feels toward his daughter. However, there are no social inhibitions operating against his caressing his little daughter as much as he wants to. Consequently, girls in the second or third years of life often transfer their deepest love to their fathers, whereas boys are less likely to do so. In any case, throughout the child's early years of life, the parents, or older persons functioning as parents, remain the chief

¹³ F. B. Strain, *The Normal Sex Interests of Children*, Appleton-Century-Crofts, Inc., 1948, 210 pp.

¹⁴ H. Ozlansky, "Infant Care and Personality," *Psychological Bulletin*, 46 1-48, 1949

objects able to bring about the emotion of love. As soon as the child goes to school, a particular teacher may displace one or both of the parents, but the teacher belongs in the same category as an adult and is not therefore a new type of love-object—though she may arouse the jealousy and antagonism of the parents.

A person of approximately the same age as one's parents is thus an infantile type of love-object. Some children, however, are allowed or even encouraged to continue fixations on parents, older friends, or teachers. If this situation persists into the years of adolescence the child is far too dependent upon older people for his emotional satisfaction, and he is usually abnormally attached to his own home. If the situation goes on into adult life, it becomes truly serious, because the individual falls in love with people much too old. A young man of twenty-five is rarely happy for long with a woman of forty-five, nor is a young woman likely to remain in love with a man who is a great many years her senior. Middle age and youth are appropriately adjusted as parent and child or as teacher and pupil, but not as husband and wife. Dependence for emotional satisfaction upon older generations is a symptom of persistent infantilism.

This fixation upon adults, often adults of the opposite sex, continues normally through the early years of childhood—that is, till about the sixth or seventh year. From this time, for a few years, children are usually more deeply attached to some other child of their own age and sex than to anyone else. Parents sometimes resent this situation and try to discourage the attachments. This second period of development, in which the love-object is another person of the same sex and approximately the same age (sometimes a little older) has been referred to as the "homosexual" stage. It is the same as the Freudian "latent" stage. These childish attachments are perfectly normal and are a necessary step in the gradual emancipation of a child from the emotional ties which bind him to his home. The period of devotion of boys to boys and girls to girls continues, usually becoming more intense, up to the years of adolescence. The attachments are so strong that boys and girls eleven or twelve years of age will have nothing more to do with each other than is absolutely necessary. As one lad remarked, "I like people—almost all kinds except girls." And girls refer to boys as "horrible," "just pests," or "disgusting."¹⁵

There is evidence that homosexual interests continue, especially in girls, for a long time. The attitude may be shown only by excessive affection for girl friends, but often it appears as a "crush"—that is, an intense devotion to an older woman. Most women teachers in high school have to contend, at one time or another, with a crush. The type of girl who develops a crush is usually a somewhat isolated individual who has had only superficial ties with her feminine age-mates and very little contact with boys.

¹⁵ Gesell, Ilg, and Ames, *op cit*, p. 345.

She may be afraid of boys, or quite indifferent to them, or friendly with them in an objective way, but for one reason or another they have never aroused her affections. Or it may be that she has never aroused theirs. Such a girl has to fixate her affections upon someone, and since her normal development is temporarily blocked, she reverts to an infantile pattern and attaches herself to an adult, continuing, however, the interest in her own sex that has occupied her during the later years of childhood. If a somewhat isolated girl has a quick mind and a real enthusiasm for her work, she is likely to be dreadfully bored by other girls and attracted to her teachers because their conversation seems to her worth listening to. Moreover, her superior work in class attracts her teachers to her. Most of these attachments are of relatively short duration, while they help to tide a girl over a crisis.

A number of situations tend to condition a girl in such a way as to make an attachment to an older woman seem to her a natural solution to her difficulties. If, for instance, she is away from home for the first time, and especially if the mother is a central figure in her home, she may turn to a teacher as primarily a mother-substitute. Or, if she has grown up in a home in which the mother was absent, she may have developed an intense desire for affection from an older woman and so attaches herself to the first such person who is kind to her. Or if she has felt herself rejected by her own mother, she is likely to show a similar reaction. Or her attachment may be a secondary response that has arisen because she is not accepted by her age-mates, and the teacher may be only a second choice. The same mechanism operates when a girl is not popular with boys, when she is afraid of boys, or when she has had disillusioning experiences of some kind with them. In all these cases, the teacher or older woman for whom the girl feels a deep affection becomes a substitute for something that is lacking in her total adjustment. Since a girl in her early adolescence is certainly going to be deeply in love with *somebody*, she turns to an older woman if other outlets are for some reason blocked. Perhaps no one of these background factors is potent enough to push an adolescent girl into developing crushes, but a combination of several of them is likely to do so.

The homosexual type of love-object, regardless of comparative ages, is obviously not desirable as a permanent stimulus. In some instances, however, an individual remains in this stage of development and becomes permanently attached to other members of his or her own sex. Usually such adults are considered definitely beyond the pale and may be quite ostracized. If the public would stop regarding childish attachments as "abnormal" and would look upon them rather as a sign of immaturity, a great deal of despair could be eliminated.

During adolescence a third stage usually emerges, in which the love-object is another individual of approximately the same age but of the oppo-

site sex For the majority of individuals this adult and socially approved type of love-object completely takes the place of the two previous types as far as the deepest emotions are concerned Naturally, girls still love their mothers and fathers, and they still love their girl friends and teachers, but their deepest emotions are centered upon boys as love-objects rather than upon either parents or friends Usually the transfer from friends of one's own sex to members of the opposite sex is easy and natural all that seems to be needed for normally adjusted youngsters is the presence in the environment of a large number of possible love-objects If a girl goes to a high school in which five hundred boys are enrolled, she is presented with five hundred potential love-objects, among which she will discover at least a dozen suited to her particular personality All she needs is enough boys to choose from Similarly, all a boy normally needs to distract his emotion from friends of his own sex is a sufficient assortment of girls

As the transfer is being made, boys and girls present types of behavior that are rather baffling to adults. The boys hector and tease the girls, hide their books, catcall to them, and hang about on street corners waiting for them to pass One has to remember that throughout childhood boys who are chums constantly pummel and shout names at each other; physical or verbal attack is a boy's commonest expression of affection It takes some lads quite a while to discover that this familiar mode of behavior, even in its mildest forms, will not do for expressing their interest in girls On occasion the boys, being young and having little judgment, may go too far, but as long as their behavior is within bounds it should not be punished, and, if reproved, only on the basis of bad manners, not bad intentions Girls are quite capable of preventing most excesses themselves, and they are well aware that they have often deliberately precipitated a boy's reactions The girl whose books are snatched, whose hair is pulled, or whose appearance is greeted by catcalls is convinced of her popularity. These early heterosexual manifestations are very trying to adults, but they seem satisfactory to the participants

Toward the end of adolescence or early in adult life there should be a narrowing of the field to one person of the opposite sex and of approximately the same age Out of possible love-stimuli the young man or woman should select one as a permanent mate The man about town and the career girl who continue for years to "play the field" have not taken this last step. Their frequent change of love-object classes them not as sophisticates but as sixteen-year-olds

The relatively few people who do not succeed in becoming attached to an adult love-object are those who are prevented either by environment or by their own nature from making the necessary social contacts In this case development is usually only retarded, but it may be permanently blocked. There are also a few people whose development is retarded or warped

because of personal traits that prevent normal social relationships. They may be homely and more inclined to run away from life than to go out to meet it. A boy may have such a strong mother-fixation that he cannot fall in love with anyone his own age, or a girl may have been so shocked by her first knowledge of sexual matters that she never loses her fear. Two case histories of people well known to one or the other of the writers appear below.

Hermann was a very small, slender man—not a dwarf, but childlike in both size and proportions. His mother adored him, waited on him, and protected him. Hermann had settled comfortably into this pattern, especially after his father's death, when the boy was eight years old. As Hermann approached adolescence, he found girls of his own age much too rough and masculine, and he was unable, because of his tiny stature, to command the respect of such girls as he might have liked. What he wanted from girls and women was protection and care—not necessarily love, which seemed to him merely upsetting. He was a great hero-worshiper of athletic boys, and inasmuch as he loved anyone except his mother, he loved them. He was twenty-two when his mother died, leaving him quite helpless in all the practical affairs of life. A few months later Hermann married his housekeeper, a woman forty years older than he. She was an impecunious widow who was willing to look after Hermann in return for financial support. They continued to occupy their respective rooms in the house, and it is improbable that there were ever any sexual relations between them. About this same time Hermann came under the influence of a very handsome, ruggedly masculine "strong" man and was greatly attracted to him. The man was already a homosexual, and soon he stimulated Hermann into becoming his partner. This same pattern has continued for many years, at home Hermann is cared for by his "wife," but he constantly has affairs with homosexual men. The background of his life makes this dual adjustment easy to understand. He is still dependent upon his mother-substitute, much as he was upon his mother during his formative years, but sexual relations with her would probably strike him as incestuous. By assuming a feminine role, he has escaped from competition with other men, and at the same time he has found an outlet for his deep need for hero-worshiping. His adjustment seems to him to be perfectly normal and satisfactory.

Ernestine is now a woman of forty. She is still unmarried and likely to remain so. Ernestine was the child of unusually tall parents, and she began early to tower over other girls of her own age and to be rejected by them because she was too rough. As a result of her size and of her rejection she turned to the company of boys. She was a good deal bigger than most of them, but they admired strength, size, and agility, all of which she possessed in abundance. During her preadolescent years she was the idol of almost every small boy in the neighborhood because of her prowess in games and sports. As the boys became adolescent, they overtook her in strength and some of them in size, but none of them in athletic skill. In high school she played on the school baseball and basketball teams. The male members had to accept some razzing from opponents, but they liked Ernestine and defended her.

In her uniform she looked so like a boy and she acted so like one that even her opponents soon forgot about her sex and accepted her. Throughout high school and college Ernestine continued to be with boys most of the time. She studied with them, went to shows with them, swam, rode, and hunted with them.

At present Ernestine is a buyer for a large department store. She sometimes buys coats and sports clothes for women but most of her work is with men's clothes, and she is extraordinarily successful. Almost all her friends are men. When social or business engagements require contact with girls or women Ernestine is amiable enough, and they seem to accept her as an odd fish though harmless, but as a general thing she simply forgets their existence. Since most of her men friends are married she sees them only at lunchtime or at parties, they are all fond of her. Two or three years ago she took the Terman masculine-feminine test and scored at the 95th percentile for men, that is, only 5 per cent of men expressed attitudes more characteristically masculine than hers.

Ernestine has never shown the slightest emotional interest in any girl or woman, and she has repulsed vigorously any effort on the part of homosexual women to attach themselves to her. A few men have been attracted by her fine physique, but she does not respond to their advances, and as they know her better they change from would-be lovers into good friends. Ernestine seems satisfied with both her professional and her private life. It is an interesting commentary upon her emotional change of sex that she does not arouse jealousy in the wives of her male friends. In all except physiological details Ernestine is a man, but because she has a woman's body there is no clear path for her to follow in reaching sexual maturity. She might, however, marry an effeminate man.

The normal development shown by stimuli giving rise to the emotion of love may be summarized as follows. The first love-objects are adults of the same or opposite sex, the second love-objects are normally persons of about the same age and the same sex, and the third are persons of about the same age and the opposite sex. During the years of infancy and early childhood, when the child's chief need is for care and security, he loves most those who give him these elements. When he begins to strike out for himself, he loves most those people who best recognize him as an individual—his friends, who incidentally serve to break his early bonds with his home. Finally, he reacts to a type of love-object which, sooner or later, will lead to marriage and will permanently end his infantile attachment to his parents.

As a sort of summary of the emotional developments of the period the writers are including a series of quotations from the diaries of adolescents. Of course, those who write diaries at all are highly verbal and are probably more given to introspection than their age-mates. However, because they can and do record how they feel, their entries may be regarded as expressing such feelings as most adolescents have but are not so free in expressing, at least not in writing. The student who reads these excerpts is almost certain to find one or two that accord well with his or her own remembered feelings at a particular time or over a particular period.

Age 19, 9 I love this house and all the lovely rooms with their precious things I love the brown walnut desk and bookshelves with their riches I love the armchairs in which so many beloved people have sat and the little smoking table with Mother's flowers on it Our house is my dearest home Without those loved rooms I could never have had the strength to live¹⁶

Age 19, 8 How much joy is in me, as mere youthfulness I am happy in the morning when I get up I am happy about the morning coffee that can taste so wonderful To tear the page off the calendar in the morning can be a joyful experience What more could I want from life than that which I have every day—or isn't that too much?

Age 17, 4 My soul is troubled, that is, if I even have one How will it live? In school one is stuffed with facts that can be understood by the mind, but the soul dwindles more and more Everything is a mad race I read, but not for my soul, only to keep my mind occupied and to have something to do I lack every capacity to be inspired, every strength of youth I live my life without really living at all

Age 19, 6 I am never free from a steady pressure of discontent in my heart that becomes stronger when I think what I wanted to do during this vacation and how little I actually accomplished What you write about my inferiority complex is all very well, but it is even worse than you think I know that to know only a little can be cured—that isn't it It is much worse that I have no interests at all, that fundamentally everything is all the same to me You know it does not come from my deepest heart or from actual need, except perhaps for reading But reading is for me only a method of killing time, a flight from my empty mind, where there is nothing Be so good as to name any good points in my nature I know of none But absolutely none Basically I am unfriendly, egotistical, jealous, and suspicious And good characteristics? Upon thinking it over, I don't find any Earlier I thought I was to a certain extent clever, but I have buried this notion as a fantastic bit of imagination I am unfortunately and to my great anger very clear that I am empty I am average or even less than average Sad, but true

I have always thought that I would remedy my faults, but now that I have time to apply a remedy, I am no better, and I have grave doubts about myself

I am too lacking in energy to pull myself together Oh, how I despise myself because I amount to nothing!

Age 19, 4 Fear! How well I know you fear of making mistakes, fear of people, fear that God will cease His goodness and leave me to die

Age 19, 0 Whence comes this mood upon me? This fatigue, this negativism, this abandoned sadness, this confusion Where can I seek advice, how can I free myself from this fog? Where are my friends? Nothing remains to be felt except the gray wall before me No one can help me, no one can advise me I remain alone, alone, not even as a whole, but piece by piece Here the body, there the soul, the heart stands alone by itself, the head lies there Thoughts flit about, and my hands lose the strength to hold them I search and search for my will power but don't find it Where has it got to? That which is the only power that can

¹⁶ W. Abegg, *Aus Tagebuchern und Briefen junger Menschen*, Ernst Reinhart, Basel, 1954, 172 pp. These excerpts are respectively from pages 85, 40, 92, 166, 45, 39, 39–40, 57, 44, 67, 66, 38.

hold everything together? Has it vanished, failed, or have I merely lost it? Where can I find it? Where seek it? Who can help me? Who can save me if I sink? Help me, please!

Age 19, 7 I believe it will be better now I can again laugh and sing and hope No one believes me how wonderful it is To me it is almost a miracle, after those horrible days Can one go through such a year, through such chaos of sadness and sense of being lost? Is it possible that at nineteen years of age life seems . . . to be a black hole full of pain? Did I really live through these days without hope, with only trifles to comfort me? Must it be that we stumble through this desert, in order to make the vegetation really acceptable?

Age 16, 5 In the evening we danced I was crazy, madly in love, and he also Do you know that we could no longer bear it among all those people? We danced a lot together, our hands almost cramped themselves together, and we both felt a shy passion when a tremor went through our bodies, until finally all those silly people with their morals became all one to us and we went out and kissed each other, and I know it was no sin, for we found each other frightfully desirable

I am today just as crazy This morning I got the first letter from him He writes completely enchanted, he holds me so dear! I noted that in the letter, although he did not say so He is named Karl Heinz I could shout it for joy in the air KARL HEINZ, KARL HEINZ, KARL HEINZ! The summer afternoon was also beautiful We were on the boat and danced. In the evening he took me to the railroad station and we sorrowfully took leave of each other Do you know, it is always remarkable that when I am with him I am not gay but serious and almost sad I don't know how this happens

Age 16, 11 If with this summer my life comes to an end I would wish that the minister should read in this book of my love [for him] and that he should say the last words over my bier It would be a last, glowing sweet summer, a summer that made life rich—or rather richer, for all the years were good The last was the hardest and the best

Age 18, 2 I feel only that unpleasantness that always meets me when love is extinguished In the beginning I felt only a hot desire for Nell Now everything is dead in my soul And there is left only a wish for a great, encircling love

What my kind of love means only nauseates me, and I feel regret for having lived through it Faithfulness is no empty madness It is only love that lasts forever. And it is a curse that I believed love to be only a diversion

Age 19, 4 With Nanette's help I have made good progress in French . She also helps me often to regain my spiritual balance and acts upon my nervousness as a pacifying drug Naturally, being with a woman brings a certain danger with it And my hot blood often rises in waves, but at its highest point I have never lost control of myself What prevents me from taking the last step is not fear of consequences or the lack of agreement on Nanette's part but the moral responsibility If I were a realist I would say Why should I do it on account of this one short moment of happiness, or why should I not do it? What holds me back? But I am no realist I feel too deeply and can therefore picture to myself how it is for a woman if it later came to a break, and then my sense of responsibility prevents me If I were entirely sure that I would later marry Nanette I wouldn't hesitate for a moment, and my religion wouldn't hold me back.

Age 15, 11 Do you know, I am so crazy, so endlessly twisted, especially today once again What is wrong I don't know I get surer and surer every day how difficult life is It isn't meant to be laughed at I'd like just once to cease raving, but I don't know how to What is life for anyway? At the moment I don't know When I think of life, this is the question What have I created? Actually, nothing I go to school, work, read, come home, but to what purpose? Last week I read the *Kreutzer Sonata* by Tolstoi It drove me nearly mad If that is the way things are, one might as well let himself be buried now as to endure

Objective Measures of Emotional Maturity

Within the past three decades, investigators have been working on tests for measuring emotional attitudes and emotional maturity The results are expressed in terms of "emotional age," a concept exactly paralleling that of "mental age" Thus a fifteen-year-old girl with an emotional age of twelve shows the emotional reactions expected of twelve-year-olds, she has a retardation of three years, and an "emotional quotient" of 80¹⁷

The tests used to determine emotional age consist actually of the measurement of attitudes, opinions, and interests One such scale contains four subtests which investigate what a pupil thinks is wrong, what he worries about, what he is interested in, and what traits he admires Children think many actions to be wrong, they are afraid of many things, they have wide interests, and they admire a large assortment of traits Adults are far more lenient in their judgment of right and wrong, they have lost many of their fears, they have fewer interests, and they admire only a limited number of human characteristics The scores for this test are therefore high for children and low for adults

Another test covers mainly interest in material objects, in careers, in ownership of various articles, in activities, and so on Items of this sort reflect maturity because interests of all kinds change with age The little boy wants a toy wagon to play with, he wants to be a cowboy or a bandit or a G-man when he grows up, and his favorite activity is "just running" As he grows older his interests change, at sixteen his most urgent wish is for a tuxedo, and he hopes to become a member of a jazz orchestra

Results from the two tests just described appear in Figure 90 In one case the curves descend and in the other they ascend, but this difference is due to the technique of test construction and is of no importance In both cases, the girls show a slightly greater degree of maturity than boys, in the lefthand diagram their scores are lower, and in the diagram on the right they are higher

Figure 91 shows the development of four specific interests between grade 6 and the end of college—a range of ten years from an average age of twelve to twenty-two. The items are from a test in which the students

¹⁷ See p 146

first marked all those things in which they felt any interest—and then double-marked the one thing in each set of five in which they had the most interest. The score on each item consists of the total number of marks thus assigned. Two items—roller skating and horseback riding—show a decided decrease with age, that is, the expressed interest in them declined. In con-

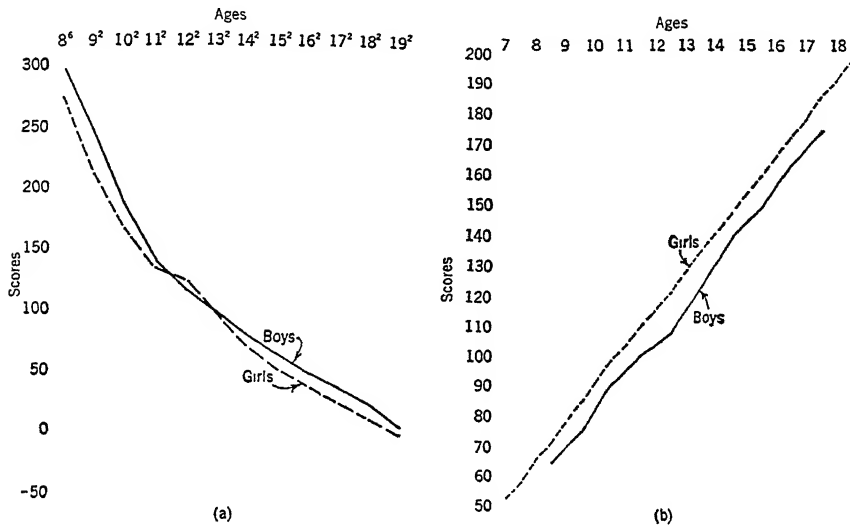


Fig 90 Norms for Emotional Age

(a) Based upon S L Pressev and L C Pressev, "Development of the Interest Attitude Tests," *Journal of Applied Psychology*, 17 1-16, 1933

(b) Based upon P H Furfey, "A Revised Scale for Measuring Developmental Age in Boys," *Child Development Monographs*, Vol II, No 2, 1931, and Sister Celestine Sullivan, "A Scale for Measuring Developmental Age in Girls," *Studies in Psychology and Psychiatry*, Catholic University, Vol III, No 4, 1934

trast, dancing and shopping for clothes showed a marked increase. In fact, since there were 167 marks per 100 students, and practically all of them must have marked "dancing" as an interest, two thirds must have double-marked it. These detailed results show the relationship between interests and age and explain why such tests are used in estimating emotional maturity.

One may investigate emotional maturity by determining the wishes of children at different ages. Children of both sexes wish for material things, while adolescents want mostly intangibles—to be more popular, to be successful in sports, to be better looking, to have a professional career. In late adolescence wishes for a good job or a happy marriage become predominant. Presumably as a reaction to World War II, the commonest single wish at all ages in a 1954 study was for permanent peace.¹⁸

¹⁸ H V Cobb, "Role Wishes and General Wishes of Children and Adolescents," *Child Development*, 25 161-171, 1954

A somewhat older investigation traced the changes in wishes from the first through the twelfth grade. Small children wanted roller skates or sleds. The desires of the high school population centered upon self-improvement ("I wish I could do better schoolwork") and upon social relationships ("I wish I had a girl friend," or "I wish I could help my mother more"). The trends were much the same for boys and girls, but the latter showed increases or decreases in specific wishes a little earlier than the former, only

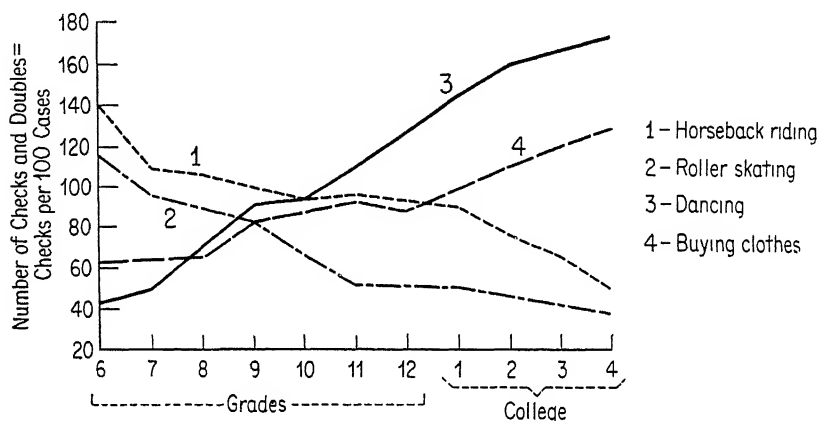


Fig 91 *Specific Interests at Different Ages*

Based upon S L Pressey and A W Jones, "1923-1953 and 20-60 Age Changes in Moral Codes, Anxieties, and Interests, as shown by the X O Tests," *Journal of Psychology*, 39 485-502, 1955

on wishes concerned with sports were there large sex differences. Two samples are shown in Figure 92. Presumably a maturity scale could be constructed on the basis of what individuals wished for most passionately.

The measurement of emotional maturity gives a clue to the behavior of sundry social misfits. Certain delinquents, for instance, are found to have relatively high mental ages, but low emotional ages. The intractable children in school, who precipitate a goodly proportion of the situations requiring discipline, are also characterized by retarded emotional development. The "problem" employee in industry and the "problem" professor in college have also been shown to have the interests, drives, attitudes, and reactions of children or adolescents, and therefore to be unemployable in work demanding adult behavior. The Army and Navy were not long in discovering that measurements of emotional age were useful in indicating men who would have difficulty in adjusting themselves to military life. Of all the conditions that prevented men from becoming soldiers, mere childishness, in one form or another, was the commonest. Some of the men could be educated into maturity quickly but others could not.

Emotional immaturity shows itself in a number of easily recognizable symptoms. The immature adult is extremely self-centered. He likes to show off any little skills that he has—doing card tricks, for instance. When he is in the wrong, he finds excuses for himself so that he can avoid feeling guilty. He dodges away from reality, especially if the situation is unpleasant. He resents authority. He avoids difficult tasks. His conduct is inconsistent.

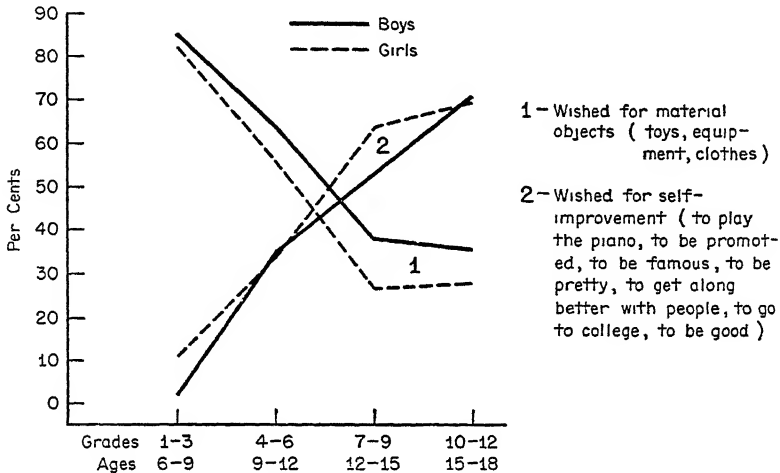


Fig 92 *The Wishes of Children and Adolescents*

Based on A. T. Jersild and R. J. Tasch, *Children's Interests and What They Suggest for Education*, Columbia University Press, 1949, pp. 108, 116.

and unpredictable. He wants the center of the stage. He easily becomes jealous, and when he likes people at all, he tends to have crushes or to worship them.¹⁹ In short, he is a child in an adult's body.

Measures of emotional age are now used to supplement results from tests of intelligence. Forty years ago bright children were often accelerated in school as fast as their ability permitted, without respect to their social or emotional competence. The results of such rapid advancement on the basis of ability alone are shown in the following study.

Oscar was a boy of nine and already in the eighth grade at the time when one of the writers first became acquainted with him. The following year the high school principal refused to accept Oscar as a freshman because of his youth, although he did not question the boy's capacity to do the work. Oscar's social adjustment was none too good at best, and it would not have been helped by admission to high school, where he would have been six or seven inches shorter and about forty pounds lighter than the other boys. Oscar's father therefore withdrew his son from school altogether and sent him to a private tutor. This

¹⁹ Based upon L. P. Thorpe, *Child Psychology and Development*, The Ronald Press Company, 1955, pp. 474-475.

move put an end to what little social contact Oscar had with his age-mates, and he became a complete isolate. Even when he did his best to play with other boys, he was unceremoniously rejected, except by those well below his own chronological age, among whom he functioned as a kind and resourceful adult mind in a child's body. Oscar spent 90 per cent of his waking hours in studying Latin, Greek, geometry, and algebra, and the remaining 10 per cent in being a supernursemaid to a group of five- to seven-year-old children.

Oscar was ready to enter college when he was twelve years old, but he was not accepted for another three years, during which he acquired a reading knowledge of French and German, a fair mastery of world history, and a working knowledge of archaeology. In due course he entered college, completed the requirements in two and a half years, and graduated at eighteen. Again he had to wait before he could continue his education, because the graduate school would not accept him until he was twenty. He spent the two years in Egypt as an unpaid young assistant of an archaeological party. He had collected the material for his Ph.D. thesis and had finished a first draft of his thesis before he was allowed to enter the graduate school. He received his Ph.D. when he was twenty-two. Since then he has become an outstanding classical archaeologist, but he has never been popular with either his co-workers or his students. Oscar retained his childishness well into middle age, but he has finally shown signs of social and emotional maturity in recent years. When he was nearing fifty, he had a sort of "nervous breakdown" accompanied by a profound melancholia. He voluntarily entered a rest home for the summer. While there, he was looked after by a pleasant, even-tempered, competent woman of about his own age. She made him so comfortable and gave him such a sense of security that he married her. She had been an orphan and had had such a hard time in life that the prospect of looking after only one wealthy and pliable man instead of a succession of complaining patients seemed like heaven to her. She is an uneducated but basically intelligent woman, who is glad to care for Oscar in return for security, present and future. She has no idea what his erudite monologues are about, but she listens pleasantly, says "Yes" or "No" or "Well, now!" at intervals, and darns socks or hems towels "so as not to waste the evening." For Oscar she is ideal. Her commonplaceness has provided just the rock he needed for emotional security.

Oscar is not yet and probably never will be a normal individual, but he is gradually mastering the simple social skills that he should have acquired as an adolescent. He is beginning to see dimly what other people are like. His more advanced students and he are meeting together in class with understanding and even a mild feeling of affection. Among his colleagues Oscar has lost most of his earlier habits of alternately pushing himself into and dominating conversation and of retiring into a silent isolation. His overcompensatory behavior was both aggressive and unpleasant and it had often brought him ridicule and overt rejection, but at least it resulted in human contacts, whereas his alternate behavior gave him safety at the cost of loneliness. This brilliant mind is gradually emerging from the maladjustment of an improper education.

If this boy's emotional age had been measured and taken into consideration, he would presumably not have been so drastically accelerated. At present

the approved procedure is to measure a child physically, mentally, socially, and emotionally, and then to consider all these factors in determining his grade placement.

Summary

An emotion is an experience that affects an individual's vital processes, stimulating him to greater activity than is normal. The central changes that accompany emotions may be mild or intense, but their nature does not alter as one grows older. There is, however, an observable evolution in the types of stimulus that arouse emotional states and the types of response that are made. A child's causes of anger are relatively simple and personal, his reactions are direct and explosive. An adolescent reacts primarily to fear situations that are social in character, in which he feels his status to be involved, his reactions show some degree of subtlety, but he is quickly broken down to childish levels if he is exposed to pressure. A child's affection is usually centered first upon his mother, and then upon his father or other adults, in the case of a girl, fixation upon the mother is often supplanted at an early age by a possessive love for the father. During childhood, members of both sexes are deeply attached to other children of the same sex and age. In adolescence an interest in heterosexual love-objects arises, at first the interest is transitory and somewhat promiscuous, but soon it becomes centered on only two or three companions of the opposite sex, and eventually upon only one. Interests and attitudes change as a result of these developments. It is therefore possible to measure the level a given individual has reached by obtaining from him a statement of his interests, attitudes, hopes, fears, and identifications. From such measurement one derives an emotional age which should be used—along with mental, physical, social, and educational ages—in the handling of children and especially in their placement in the school grades. Emotional life furnishes the basic drives that impel an individual to action. These drives vary in strength not only from person to person but from age to age. When they cannot be satisfied, they lead to frustration and conflict, which may be resolved in a number of ways, some of which are more healthy than others. Emotions inevitably find some outlet, if one is blocked, another is substituted.

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13

The Developing Ego: Dangers and Escapes

There are almost as many definitions of the ego as there are authors who write about it. One that is perhaps sufficient for the purposes of this chapter and has the merit of being simple is as follows: "An ego is that sense of identity which provides the ability to experience one's self as something that has continuity and sameness, and to act accordingly."¹ Perhaps for the purpose of explaining to teachers the difficulties typically encountered by adolescents in their normal growth it will be sufficient to consider the ego mainly in terms of its attitudes and drives. An ego drive may be defined as "the impulse toward self-preservation, ego maximization, and group conformance, the development of which is deeply rooted in biological constitution and markedly influenced by the social nature of man's existence."²

Even a small child soon learns that certain things are *his*—his parents, his home, his toys, perhaps even sooner he discovers that *he* has desires—things that he wants, feelings that he enjoys, supports that he needs, urges that he must follow. Certain events, things, and people give him satisfaction, others merely get in his way. As he grows older, his needs and attitudes change. Some investigators have felt that there are no inherited elements in the ego, others, and these are more numerous, seem to feel that certain traits either are inherited or are acquired at an extremely early age. In any case, no one denies that ego attitudes, ego drives, and ego satisfactions change. That is, the ego is thought of as being extremely flexible and as constantly altering, usually in response to environmental pressure. Most writers agree also that during the years of adolescence there is a reorganization and reorientation of the ego attitudes and drives, the change is sometimes quite extensive, and an almost new person may emerge as a result. In any case, the new needs for attaining status among one's peers and for meeting the demands of oncoming maturity, plus the imbalance caused by the internal changes within the body, precipitate alterations in the direction

¹ E. Erickson, *Childhood and Society*, W. W. Norton & Company, 1950, p. 38.

² *Psychiatric Dictionary*, Part II, Supplement, Oxford Medical Publications, 1953, p. 626.

of drives and in the nature of satisfactions and goals. It is also typical of the adolescent period that the developing, expanding ego is likely to meet frustrations and denials on all sides. The teacher needs some understanding of what is happening to the adolescent, in order that she may assist him to tolerate necessary interferences and to avoid those forms of evasion that are most damaging to further healthy growth.

All behavior has some kind of goal that is supplied by the ego. And striving toward an objective is a basic life activity. The ego also supplies the motivations that lead one into setting up a goal, but practically any motive may be attached to practically any objective, with resulting integration into patterns. Conflicts may also arise, but only when the goals of the different patterns are themselves incompatible. Social motivations are directed toward objectives that either will enhance the ego—allowing it to develop further—or will defend it from a situation that is sensed as dangerous to its stability or growth. Throughout life, an individual keeps on striving toward one goal after another and trying to integrate experiences and attitudes into a coherent whole. But the integration is constantly being torn down by changes in internal development—such as those already described for the period of adolescence—or by changes originating in the environment, especially in interpersonal contacts. These interferences may or may not be real, their indispensable characteristic is that the individual *thinks* they are real.

The normal growth of ego attitudes and ego urges is reflected by any number of commonplace happenings and interests. For instance, a boy wants in turn to become an Indian fighter, a pirate, a forester, a structural steel worker, an aviator, a race-track driver, a precision mechanic, a naval designer, and a bridge engineer. Or a girl progresses in her reading interests from fairy tales to stories of home life to adventure yarns to love stories to biographies of famous women—and probably to books on baby care and nutrition. The developing ego and its idea of itself are also reflected simply but pertinently in the names by which an individual wishes to be called at different stages of development. A child of two is probably called by a nonsensical nickname, based upon his first effort to pronounce his own name. If his name is "Jonathan" he may emerge from babyhood as "Yo-Yo." This tag is acceptable enough to his two-year ego, but his four- or five-year ego finds the babyish tag definitely insulting, and he announces that his name is "Jonnie." By the time he is nine or ten, his ego rejects the diminutive ending, and he wishes to be known as "Jon." If at this point he can pick up some meaningless nickname, such as "Kip" or "Wuz," so much the better, he feels more secure among his age-mates. As he approaches adolescence and feels the paramount need to be as much like his peers as he can and as conspicuously masculine as he can, he may reject "Jonathan" altogether as lacking in the desired masculinity and write his name as "John"—

an undeniably male name of high anonymity. But in his young manhood, when he wants to establish himself as an individual, he takes back the "Jonathan" because it better satisfies his changed ego attitudes. By the time he is a middle-aged banker he may be happier with "J. Addison Jones" as a name that fits his own picture of his status better than "Jonathan A. Jones" would. One of the writers began life as "Leenie," progressed to either "Sister" or "Kid," developed into "Estelle"—a name chosen by herself at the age of twelve and having nothing to do with baptismal nomenclature—went through high school as "Stella" and through college as either "Chug" or "Boston," only to emerge into adult life as "Tante" to all and sundry. It often takes a moment of reflection to sign a check. One could almost write a case history from this series of names and nicknames! If the reader will think back to his or her own series of names, the memories may shed light upon the stages of ego development.

By the beginning of adolescence a child has become a member of a school group, a neighborhood group of all ages, a peer group, and probably a church group, in addition to being a member of a family. In a dim way he senses that he also belongs to a city, a state, a country, and a race. Most children manage to work out a fairly stable set of goals, motives, and attitudes during their late childhood, the girl of ten or the boy of twelve is in general quite a stable individual. Then adolescence upsets the equilibrium by the rapid growth of the body, by the emergence of powerful sexual urges, by the need to fit oneself into a masculine or feminine role, by the new demands for social status, by the oncoming rush of maturity with its social, familial, and economic problems, by the need for establishing reasonably permanent vocational objectives of a sort that will satisfy the ego attitudes and will not make such demands as to lead to later ego damage. The multiplicity of urges and the rapid succession of changing goals make for confusion, conflicts, evasion, and sometimes regressions. One can understand the sixteen-year-old boy who spends Saturday morning spinning a top or playing "catch" with his eight-year-old brother, this regression may be the only activity of the week in which he knew in advance he would be successful.

It should also be appreciated that the more definite the social norms of the adult group around him, the easier it is for an adolescent to adjust himself, because he at least knows what his objectives are. Rigidity is not a desideratum, but clearness is. In a rapidly changing society he does not even know where he is supposed to be going. The resulting disorganization may take several forms, of which a common one is the rejection of the adult world *in toto*, plus a firm anchoring of the ego in peer groups. The adolescent boy who is at home just long enough to sleep and to gulp down breakfast has probably already made this transfer. It will serve him for a while, but presently he must either grow up or remain a perennial adoles-

cent Present-day society is not only extremely mobile, it is threatened from so many sources, from within and without, that many adults have been reduced to living from day to day, making no plans, adhering to no norms, and waiting to see what the "new" world will be like—if there is one. Such adult disorganization inevitably has its reflection in more adolescent instability than is normal for the period. The teacher of today, therefore, needs to be especially sensitive to the numerous patterns of escape, evasion, and avoidance, because the precipitating situations are more numerous than usual.

Patterns of Escape

Everyone has to live through longer or shorter periods of time during which he is unable to proceed toward his goals. At all ages it is one of the commonest experiences in life to be frustrated by circumstances or by one's own nature. If the experience is damaging to ego development, it is mainly because of the reactions made, not because of the experience itself. Adolescents sometimes try to resolve their difficulties by methods that are a good deal more damaging than the original situation was. They can be guided into less extreme and less bizarre patterns of response, but they can no more avoid frustration and conflict than, as small children, they could have avoided skinning their knees or cutting their fingers.

Frustration is the feeling of helplessness, disappointment, inadequacy, and anxiety that is produced by interference with an ego drive. This complex feeling, plus the consciousness of uncertainty as to what should be done next, produces a general tightening and defensiveness of the whole organism. Thus interference with a drive leads to frustration, which leads to tension, which leads to response, which leads to readjustment—good or bad. The trigger that sets off the series is the interference with a drive which has its roots in a human ego. The blocking may be due to any number of causes, external or internal. For instance, an adolescent boy who feels a need of friendship with girls may be blocked because he is in a boys' boarding school where he has few chances to meet girls, or he may be checked at home by the presence of a possessive mother who effectively keeps girls away from him and him away from them. Such conditions act as external privations over which he has little control. Or his desire may be blocked by internal difficulties, such as the fear of appearing ridiculous, by shyness, or by a conviction that he would be unable to talk to a girl. In still other instances, a drive does not come to normal fruition because it is not as strong as some competing drive. The boy who wants more girl friends may also want to become a famous surgeon, he has to spend so many hours in the laboratory and in studying that he has no time for social life. His urge is blocked, therefore, by his own competing desire for prestige.

As can readily be appreciated, any given ego attitude has a moderately good chance of being either partly or wholly frustrated before it can be satisfied. People differ greatly in their tolerance of frustration. They differ also in the readiness with which they can find and enjoy substitute means of satisfaction when the more direct ones are blocked. And they differ in the type of escape from conflict that they select.

In theory the pattern of escape should lead to a better relationship with other people, should be conducive to mental health, should make future adjustments easier, should benefit society, and should not divert one from one's goals in life. Unfortunately, there are no perfect patterns. All of them are forms of compromise between what the individual ego wants and what it can get. However, it is often helpful to check against these criteria any given compromise in order to estimate its values and to recognize its defects.

Some forms of escape occur more frequently than others, and many of them—if used in moderation—are normal and relatively harmless. They are also highly useful because they permit the ego to develop, to reconcile its conflicting drives, and to shed its feelings of guilt. It is when one pattern of escape is established as a fixed method for dealing with all reality that it becomes dangerous.

The patterns of evasion are classified, mainly in the interests of clearness, into five groups in Table 23. Two sets of terminology are given because both phrases appear in the literature.

1 Most people at some time try simple repression as a pattern of response, and a few persist in its use. Repression is an almost complete block to a drive that is for some reason considered inadmissible by the underlying ego structure. At best it brings only partial escape. It consists essentially of convincing oneself that a given impulse is wrong and of thenceforth denying its existence. It is the sort of reaction made, for instance, by an honorable man who finds himself in love with his brother's wife. The main difficulty in its use is that emotions do not stay repressed, they merely submerge and then pop up somewhere else in more or less disguised form, often being even more destructive than fulfillment of the original drive would have been. The individual who tries simply and directly to repress an emotion does not usually distort the situation that has produced it, he denies its reality altogether. Other patterns of response involve more or less distortion.

2 An individual is distorting reality if his conception of it—or of some phase of it—differs markedly from that of other people. Distortion is not a deliberate act of misperception, it is an interpretation that for some reason relieves the ego of strain, but it is entirely unconscious. The first escape on the list of distortions is rationalization. An individual is rationalizing when he gives a minor or faked motive for conduct that arises from

Table 23 ESCAPES AND ADJUSTMENTS

- 1 Escape by denying reality (adjustment by repression)
- 2 Escape by distorting reality (adjustment by deception)
 - a Rationalization
 - b Projection
 - c Segregation
 - d Sour grapes
 - e Displacement
3. Escape by retreating from reality (adjustment through surrender)
 - a Regression
 - b Fantasy
 - c Conversion
- 4 Escape by attacking reality (adjustment through attack)
 - a Physical aggression (delinquency)
 - b Verbal aggression
- 5 Escape by compromising with reality (adjustment through compromise)
 - a Compensation
 - b Sublimation
 - c Identification

Adapted and modified from N. Cameron, *The Psychology of Behavior Disorders*, Houghton Mifflin Company, 1947, pp. 142-186; J. M. Josselyn, *Psychosocial Development of School Children*, Family Service Association of America, 1948, 134 pp.; P. M. Symonds, *The Dynamics of Human Adjustment*, Appleton Century-Crofts, Inc., 1946, Chaps. 8-20; H. Schacter, *How Personalities Grow*, McKnight & McKnight, 1949, Chaps. 12-15, and L. P. Thorpe, *The Psychology of Mental Health*, The Ronald Press Company, 1950, pp. 133 ff.

some other motive that is too painful for the ego to accept. Thus, a dull freshman girl in high school may want to go to college but at the same time may be aware at least dimly that she has too little ability to do so. To admit openly that she is stupid would undermine her ego structure and her ideal of herself, so she rationalizes her conflict of desires by saying that she prefers the commercial to the college preparatory course because all her friends are taking it, because it leads to quicker financial returns, or because she had rather take "modern" subjects like shorthand than dull, stuffy, "impractical" courses. She has distorted reality because she has not given a true picture of it—but the distortion is more palatable than the truth. Since these patterns are usually unconscious, the user is not aware of the distortion. In such a case as that given above the ego has avoided damage by a relatively slight distortion.

Projection is a less desirable pattern of response than rationalization, partly because it involves a greater distortion of reality and partly because it is more crippling to ego attitudes. Since, however, the average human being has great difficulty in saying such simple words as "I was wrong," or "I wasn't able to do it," this pattern is popular. Suppose, for instance, that

a pupil who has tried very hard to pass a course in English composition finds he is failing. Failure is most uncomfortable, so he is likely to resort to a convenient "projection"³ of the blame. He may say that his father is a foreigner and speaks little English at home, that his mother was always a poor speller and never liked to write compositions when she was in school, and that his older sister also had trouble with English. In this way he can explain his own failure in terms of heredity and home environment, thus projecting the blame onto somebody else and relieving himself of guilt. By an obvious distortion of reality he has escaped from the emotional situation altogether.

"Segregation" is a name given to the practice of keeping different sets of motives and practices from interfering with each other and precipitating crises. The classic example of this pattern is the factory owner whose drives for personal welfare and dominance lead him to underpay and overwork his laborers, overcharge his customers, and generally make money out of other people's misery. But on Sundays he is dominated by another set of objectives—a desire for prestige in belonging to and helping to support a religious group, a desire to bask in approval, and a desire to save his own soul. He is therefore on Sundays a devout worshiper. The common interpretation of his conduct is that he is a hypocrite, but this appellation is often erroneous. The man is actually sincere in accepting two contradictory sets of beliefs. He defends his ego from conflict and strain by keeping each set of goals in its own compartment. He honestly believes in Christianity, but his life would be thrown into confusion if he allowed such a precept as "Do unto others as you would have them do unto you" to get mixed up with his business. He distorts reality because he accepts as true in one frame of reference what he rejects as false in another. Such a man may be comfortable enough at the moment, but he is walking a tightrope. If he falls off, the damage to his ego may well be irreparable.

A fourth type of evasion in this group is called "sour grapes," the name being derived from the Aesop fable about the fox who could not reach the grapes he wanted and so comforted himself with the conviction that they were too sour anyway. When an adolescent states loudly that all fraternities and other secret organizations are worthless, he is probably displaying exactly the same pattern of response. At an earlier time he was very likely driven by the usual social urges of adolescence to set up as his immediate goal an election to a fraternity. His failure to be chosen was so crippling, the threat to his status so powerful, and the need to change his objective quickly so pressing that his ego would have collapsed under the strain had he not found an escape that preserved his ego structure intact but permitted

³ At other places in this book the term "projection" is used in another sense—that is, in the meaning of displacing one's own attitudes or drives onto another person, attributing to that person what is not acceptable to the ego. It has also the above meaning, however.

a change of goal. What would have been a crushing defeat has therefore been turned into a defiant attack, and that particular emotional problem has disappeared. This pattern is definitely bad because it precipitates more problems than it solves.

The last of the escape patterns involving distortion is called "displacement." It is a response by which a destructive emotion that is generated by one person or set of circumstances may be transferred to another. Suppose, for instance, that a pupil has been punished unfairly by his school principal and that he feels intense resentment. His first impulse may be to injure the principal, but he is restrained by a fear of consequences. The principal has a status that he dare not attack. As long as his hostility continues to boil inside him, he is in a state of profound disorganization. On the way home from school he happens to meet a small, shy, inoffensive Negro boy against whom he has no complaint, but he nevertheless attacks him and inflicts upon him at least some of the damage he would like to have done to the principal. His emotional response was displaced from the real but untouchable object of his wrath to an object that he could assault with far less danger of punishment and no likelihood of damage to himself. This transfer of emotion is not conscious, the matter would be much less serious if the boy were intentionally "working off" his anger. Unfortunately, he transfers his emotion so completely that he really hates the Negro boy instead of the principal, and may presently begin to hate all Negroes. This pattern is at the base of much race and intergroup prejudice. The distortion of reality is extreme, and the actual damage to the ego is also extreme, but it brings momentary relief. It is the process by which the thoroughly maladjusted person finds a scapegoat for the wrath that would otherwise destroy him quickly—instead of gradually!

3. The escapes in the next group are brought about by ignoring reality and erecting a neurotic bulwark against it. The commonest pattern of this type is evasion by regression or surrender. Thus, the shy daughter of a domineering mother finds her first efforts at life on a mature level quite unsatisfying because she comes into frequent, sharp, painful conflict with her mother, by whom she is always defeated. If the daughter has already developed a secure ego and if she is supported by her age-mates, she will revolt and leave her mother—actually or emotionally—but if her ego structure is insecure and she is isolated from her peers, her most probable escape is by surrender and regression to a childish level, at which her mother's domination seems natural and her own chief urge is to please her mother. The mother-little girl relationship has at least the merit of being peaceful—but it is peace bought at the price of surrender of the ego and reversion to childish goals.

Undoubtedly the commonest of all escape patterns is the substitution of daydreaming for action as a means of draining off painful emotions.

Fantasy is fairly common at all ages and practically universal in adolescence. For the most part it is beneficial and does no apparent harm, as long as the daydreamer is perfectly sure which is the dream and which is the reality. For instance, a girl may want desperately to be popular but is not, or she may have to stay home from a dance, to which all her urges are driving her, because she has no appropriate clothes, or she may simply be too sick to go. Her unpopularity, her poverty—which may consist only of having no *new* dress to wear—or her illness is a reality. Of these she can probably face illness with no more than temporary strain. It is “respectable.” Her poverty, real or imagined, is harder to accept, and she may be completely unable to face her negative social status. One possible way of defending her ego is to indulge in a daydream of being the belle of the ball. It is when the isolated daydreamer begins to think she *is* the belle of the ball that the pattern becomes dangerous. When and if the substitution of fantasy for reality becomes habitual, the dreamer is mentally ill, and the ego may be damaged beyond repair.

Finally, in this third group, there is escape from harsh reality into illness or physical handicap. This response permits the individual to escape the immediate situation that the ego cannot face, although it does nothing to resolve the underlying conflicts, but merely changes their mode of expression. It often does not altogether rid the user of guilt, but the feeling is attached to something else rather than to the original cause. This method of avoidance always looks spurious to the outsider, who has difficulty in believing that the illness or seizures of whatever type are real and not mere alibis. For instance, one of the writers had a secondary school student who was under doctor's orders to cut all of her examinations because of the serious arm cramps that she developed. These were not mere imagination. The muscles in her arm stood out from the tissue and contracted so violently that on one occasion they dislocated a bone in her wrist and on another they pulled a tendon loose, her hand was drawn backward until it was almost against her forearm. The pain was excruciating. To imagine that anyone would undergo such agony on purpose is ridiculous. It is true that this student had a pronounced fear of examinations, which she began to dread in elementary school. On the day of an examination, she was in a state of profound disorganization, in which many conversion symptoms, such as diarrhea and dizziness, were already observable. She never succeeded in writing more than a few words before the cramps developed. Although it introduced a new kind of suffering, it removed her from her emotional conflict by making the writing of a test impossible and at the same time it absolved her from any feeling of guilt. On the oral examinations that were substituted for the written—or, rather, unwritten—ones, this girl did poorly, and her marks in all subjects were barely passing. For reasons not entirely clear, this girl had very early set

up an objective of academic success as her main ego goal, an attitude which led her to elect the hardest possible courses, and she was completely caught in an emotionally loaded situation which was so threatening that anything was preferable to the destructive power of the reality

It may already have been noted that these evasions by surrender and retreat, if they become fixed methods of avoiding interference with ego satisfactions, will lead to neurotic or even psychotic behavior. In other words, neurotic reactions may be thought of as constituting a defense thrown up by the ego against conditions that are intolerable, against drives that seem shameful, or against feelings of guilt.

4. Some individuals are too vigorous to retreat or compromise and too clearheaded to deceive themselves by distorting reality, on major issues at least. They therefore attack the situations or symbols of those situations that are inhibiting the full expression of their desires and try to demolish the reality that is interfering with their satisfactions and goals. For instance, a vigorous boy from a poor family is likely to wish he had more money. He does not, however, sit down and daydream about the money he would like to have, nor does he tell people that all great men were once poor boys or that wealth is all delusion anyway and not worth fighting for. His pattern of response consists of going out and stealing some money, or an object that he can turn into money. He may also let off some of his emotional steam by scratching the paint off handsome new cars, by shouting scurrilous comments at well-dressed children, or by throwing a rock at a shiny top hat as its wearer is making his way to church on Easter Sunday. The less important modes of defiance are usually classed as rowdiness, if the reactions are serious, they are delinquencies. The delinquent is thus a person who is protecting himself from a damaging reality by attacking it. The attack may be either physical or verbal. In the latter case, it takes such forms as excessive criticism, scurrilous remarks, rumors, cruel jokes, unpleasant nicknames, catcalling, and the like. The damage to the underlying ego structure is extreme, as will be pointed out in greater detail in the chapter on delinquency.

5. The last group of possible escapes contains those that are probably best for mental health. The individual does not distort reality to escape from his own guilt or inadequacies, he does not pretend that reality is not there, and he does not try to demolish it. He does, however, divert its impact and works out a compromise which, while not giving complete satisfaction, at least gives enough to provide relief from tension, to channel urges into harmless and sometimes useful modes of expression, to permit continuation in his pattern toward his goals, and to protect his ego from serious crippling. The first of these patterns is called "compensation." This term means simply that an individual compensates for a poor showing

in one aspect of his life by a good showing in another. A common example of this response is seen in the pupil who is too small for athletic competition and too shy to be a social success, and who therefore compensates by getting the best grades in class and by being regarded as an academic prodigy. Actually, success in his studies may be only his third choice, but it gives at least some satisfaction to his drives for recognition among his peers. Unfortunately, his concentration upon academic work may serve to alienate him still further from the social intercourse and physical exercise that he badly needs. Actually, his ego is already suffering a good deal, and his pattern of response is leading him to reject several phases of life in which he needs competency to become a normal, well-balanced individual. Compensation is good as far as it goes, but it needs supplementation.

If it were necessary to pick out one pattern as the best of the lot, most people would choose sublimation. One sees this process at work when the school bully is appointed as the school policeman. His urge to dominate has been diverted from twisting the arms of little children to seeing them safely across the street. His urge to inflict pain is being controlled by his urge to be admired. His exhibitionistic tendencies are satisfied by his uniform or armband, which sets him off from the others. His behavior now leads to satisfaction, whereas before it was not only undesirable in itself, but led to further punishment, further ostracism, further tension, and further damage to his ego structure. The boy's fundamental drives have not changed, their mode of expression is, however, constructive instead of destructive.

At the end of this long list of possible reaction patterns comes a most convenient pattern of adjustment known as "identification." It is particularly useful to those who for some reason are inferior. For instance, a girl of average ability with brilliant parents and one or two older and equally brilliant siblings is in no position to reach the family standard of superiority. Although she might be admired as bright in some families, she is headed for strain, despair, failure, and tension in her own. Through hero-worshiping identification she can escape some of her troubles because one does not expect to compete with one's heroes. One sees the same pattern in the humble bookkeeper who says with pride, "My firm did a half-million dollars' worth of business last year." He has escaped from his own insignificance by his identification with something bigger and more important. This pattern is relatively harmless, but one sometimes sees an extreme use of it that has led to disaster. One of the writers knew a pair of nonidentical twins, a brilliant boy and a girl of only average intelligence. The difference was further widened by parental attitudes, which allowed the boy freedom and put shackles upon the girl. She lived mainly in her brother, was always his best listener, had only such friends as he had, became

his chief assistant in his work, and accepted his triumphs as her own. When he died, she emerged from the expected physical collapse as nobody. She had no independent ego, she had no goals, she had no drives, she did not have even a home or a job. She still exists, but, in any real sense, she died when he did.

The last three patterns of evasion are especially useful because they meet at least some of the criteria set up at the beginning of this discussion. They are relatively healthy for the individual, they often lead to a better relationship with others, and in moderation they do not interfere too much with the usual goals of life.

All the patterns discussed above have an immediate value because they permit an individual to defend his ego structure against attack. When they are used occasionally, their effect upon the user is beneficial rather than otherwise. But as habitual responses they are unsatisfactory because they warp the structure and they lead to even more damaging situations that the weakened ego is even less able to meet. A teacher should therefore realize that projection, rationalization, compensation, daydreaming, regression, conversion to physical handicap, and hostility are all danger signals. They indicate the existence of chronic frustration, tension, and maladjustment. Early recognition is essential if a pupil is to be prevented from developing a warped ego and an abnormal personality. A teacher is not supposed to be a psychiatrist, nor should she embark upon treatment, but she should be able to recognize common escape patterns.

Summary

The ego grows, develops, changes as an individual passes from one age level to another. It supplies both motivations and goals. It integrates drives and responses into patterns that are satisfactory for its growth. When it is threatened, it protects itself from danger by patterns of escape that will at least "hold the line" until something better can be substituted. There are many possible escape patterns, but they vary a good deal in their nature, their usefulness, and their capacity to eventuate in normal adjustments. Almost everyone uses nearly every possible pattern at one time or another, but most people settle upon two or three that are relatively undamaging to the ego, acceptable to society, and consonant with their own goals. Those who do not find a healthy form of escape find an unhealthy one and may destroy themselves in consequence. A teacher is in a position to note the escape patterns used by her pupils. If she can learn to recognize them, her understanding of adolescent problems will grow and her instructional procedures will profit accordingly.

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14

Personality

A teacher in this day and generation should have an understanding of typical developments in the field of personality. In order to gain the necessary insights she needs a grasp of at least a few theories of personality and an acquaintance with some of the commoner measuring instruments. The literature of today is full of references to the growth and measurement of personality. Since one task of the modern teacher is to help her pupils to become normal individuals, a brief consideration of theories of personality should establish a frame of reference for her own observations and for her conduct of classroom activities. She may be called upon to administer tests of personality, or she may desire for her own guidance to use such measures. In any case, she cannot read today's educational literature without some background in both the theories and the measurement of personality. The present chapter is intended to provide such an orientation.

For the purposes of this book, personality will be regarded as a fairly stable configuration of tendencies—acquired or inherited—around which the individual attempts to integrate his experiences and from which his behavior emerges. It seems probable that there is a very early establishment of the central core of traits in each individual. It is, however, clear that personality develops and changes more or less throughout the life span as a result of the environmental pressures to which it is subjected. External expressions at least, and quite possibly the central traits also, are affected by illness, disease, and prolonged stress. These external expressions, or behavior, are the only directly observable facts, the theories of the over-all structure of personality are always based upon inferences and even these are inevitably interpreted through the personality of the observer. It is, however, possible to recognize that each individual is a consistent and unique person, not quite like anyone else, whatever problems of cause, origin, or modification may still remain for exploration.

In and out of the classroom, teachers and pupils constantly exert pressures upon each other and constantly adapt themselves to such pressures. The extent to which these everyday stresses can cause personality to alter, or the stage in development at which alteration becomes difficult if not impossible, or the exact circumstances under which modification takes place

are all questions that have not yet been answered. There is certainly some evidence that not even the central core becomes established as early as was once thought. For instance, during the recent war when many thousands of children lived in concentration camps, there was a remarkable alteration in personality in a great many cases. The deprivation of stimuli in these camps appears to have been damaging to the development of adequate personalities, especially among the younger children who had little memory of any other kind of life.¹ However, without respect to the constancy of the "core" personality, it is desirable to encourage environmental and interpersonal experiences for the adolescent—experiences that will support his own efforts toward integration and will minimize the number of warping pressures exerted by illness, protracted physical or emotional stress, hostile interpersonal relations, or absence of adequate outlets for adolescent drives.

Before taking a brief look at the various theories of personality, it might be well to inquire concerning the meaning of personality to the adolescent himself. Although an adolescent is more or less affected by the layman's loose meanings for "personality," he is also acutely aware of a genuine and vital meaning of the word and is constantly making attempts to answer the question, "Who am I?" The way in which the answers to this query emerge gives important clues to his concept of himself. Most adolescents have already made some identification of themselves and are aware of certain patterns in their reactions. Some of these are clearly perceived, some misinterpreted, and some barely sensed as existing. If a single, rough-hewn estimation of "normal" personality development is permissible, it might well be found in the extent to which an individual throughout his entire life span is able to recognize, integrate, and check his awareness of these patterns against realities, including his ability to use them for productive survival in a culture, the mobility of which he must match by his own flexibility. Recognition by teachers that not only the adolescents in their classes but they themselves are in a constant process of patterning and checking could do much to ease the interpersonal relations which sometimes become critical in the schoolroom.

Theories of Personality

In order to evaluate the various problems involving human personality that are met by every teacher, it is desirable that the student should become aware of at least some of the many viewpoints from which material relating to the nature, structure, and development of personality may be considered. All the approaches, as summarized by a later table, share one characteristic: each reflects the background, particular studies in the field,

¹I. Stevenson, "Is the Human Personality More Plastic in Infancy Than in Childhood?" *American Journal of Psychiatry*, 114:153-161, 1957.

and personality of the theorist who organized each interpretation. The resulting diversity provides a wide variety of ideas and provocative glimpses into both methods and assumptions. Many of the theories are quite complex. The presentation in this chapter will err on the side of simplicity; its purpose is to present to the student a few brief sketches, on the basis of which he can select a further reading along any line that seems exciting to him. No effort will be made to present every theory that has appeared, the sketches are restricted to a half dozen that are representative of the various distinctive contributions to the present body of thought.

Since a good deal of the material that one reads has been influenced by the psychoanalytic point of view, it seems reasonable to start with its originator, Freud, and the students of Freud who modified, expanded, and developed the fundamental concepts.

Freud's theory has three basic concepts. First, that the important elements of personality, which form the core, are fixed during the first two or three years of a person's life. The experiences themselves are forgotten, but the reactions made to them remain and become the fundamental elements in the developing personality. Second, Freud considered all drives to be direct or indirect forms of the sexual urge. Third, he postulated three levels of personality: the id, the ego, and the superego. This theory of personality has had a profound influence upon the early training of children, because of its emphasis on the early years in furnishing the experiences upon which the mature personality rests. It has, however, at least three shortcomings. The most serious is that it did not emerge from experimentation and does not seem to hold up very well when one tries to check its bases experimentally. Naturally, the theory rests upon a host of observations by Freud himself in the course of his extensive experience with neurotic and psychotic patients, but he was an observer, not an experimentalist. His theory may be, therefore, either the enlightening insight that comes to the expert or a mistaken concept. At the present time, no one can state definitely which it is. Moreover, Freud's theories have a definitely narrow basis. It does not seem as if all the formative influences of life can have occurred before a child is three or four years old, nor does it seem reasonable that all actions from birth to the grave are the results of sexual drives, no matter how camouflaged.

Jung was a student of Freud's but he soon began to differ on many points from his teacher. He insisted especially upon the importance of purpose and aim in modifying and channelizing personality. He believed that each person, with psychic energy—often called the libido—as a driving force, moves constantly toward a more "complete" form of development, by stages that are expressed in terms of goals, from mere survival in infancy through the dominance of sexual expression in adolescence to the level of cultural, philosophical, and spiritual goals in maturity. The predetermined

pattern is assumed to unfold in regular stages, but with individual variations in the steadiness and intensity with which each phase is developed. When an individual has achieved his own development, he integrates all the elements by sublimating the discharge of psychic energy from the more primitive toward the more differentiated and culturally useful expressions, usually in a pattern either introverted—that is, inwardly focused—or extroverted—that is, socially focused. Jung also contributed the idea of the “complex,” the existence of certain constellations of attitude and reaction. This term has come into everyday usage. His word-association tests, designed to measure a person’s emotional reactions to key words and ideas, have become standard procedure, especially in the investigation of aberrant attitudes. He has also made extensive use of anthropological materials in explaining all phases in the development of personality.

Another follower of Freud is H. A. Murray. His emphasis has been upon the biological components of personality and on the enormous complexity of the individual as a functioning organism. Unfortunately for the reader, he has seen fit to invent a vocabulary that is even more complex than his theories. It is difficult to condense the almost symphonic sweep of his theoretical position into the layman’s vocabulary, and the following account necessarily omits many of the finer points. The interested student would do well to read some of his original work for the special poetic quality of his writing.

In contrast to those who have studied specific fragments of behavior or special traits, by “personality,” Murray means the *total person*. He considers that “every person is an emergent entity of and in a certain physical, social, and cultural milieu.”² Personality is a co-ordinating force in man’s life. It endures throughout life, and it both transforms and is transformed by the developmental process. It exists as a day-to-day function of the individual but is seen by others only in its specific expressions. The resulting abstraction on the part of the observer as to the nature of the underlying personality may or may not conform to the pattern that actually exists in the individual being observed. Thus, to put the matter in capsule form, a man who listens politely to what everyone has to say but contributes little is often considered a pliable person with no mind of his own—a deduction based on observation—when to himself he is merely being well-mannered and knows exactly what he thinks about the topics under discussion.

Murray uses the same concepts—the id, the ego, and the superego—in much the same meaning as Freud had used them, except that he credits the id with an additional function of organization and retention of the culturally acceptable as well as the primitive impulses. Since the individual’s basic needs and emotions are expressed in both negative and positive terms, the

² H. A. Murray and C. Kluckhohn, *Personality in Nature and Culture*, Alfred A. Knopf, Inc., 1953, p. 6.

ego is enabled to act as a scheduler of the positive elements of the id and a suppressor of the unacceptable ones. The superego then assumes the character of a culturally implanted but highly internalized control system which acts to interpret and impose the standards that the individual gradually learns from outside authority—parents, teachers, peers, and so on. To these three entities Murray adds an ego-ideal to which he gives great importance, as the individual's picture of the role he wishes to fill both in his internal life and in his relationship to his environment. This role may be allied with or opposed to the superego. Since it obviously undergoes many changes as the individual grows from babyhood to adulthood, its inclusion serves to strengthen Murray's emphasis upon the capacity, indeed the necessity, of change and development in the personality well past the childhood freezing point proposed by more orthodox psychoanalysts.

As the personality develops in response to environmental pressures, it advances toward its goals, it reduces conflict, and it co-ordinates motivations with goals, thus leading to a unique directionality in each individual. From this concept Murray develops detailed lists of the determinants of goal seeking, breaking them down into twenty specific needs. Some needs find their expression mainly in the inner satisfaction of the individual, but most of them involve interaction with the environment. Throughout his work Murray makes the relationship of need to goal paramount. Although he follows the general Freudian pattern of putting much weight upon the satisfactions or deprivations of infancy and early childhood, he elaborates considerably upon them, particularly in classifying the recognizable effects of factors in later life.

In an effort to isolate certain components of personality for detailed study, Kurt Lewin has developed a "field" theory, which he assumes to be a representation of the situation in which individual perception and behavior take place. While accepting the wholeness of the individual, Lewin feels that an objective, mathematical representation of concrete situations can be made and analyzed with great accuracy. To make these interrelationships of individual and environment clear-cut, he presents them graphically and assumes the graphs to be representations of real, existing situations. Figure 93 shows a person in a field of his own perceptions, called his "life space." Stimuli from the outer world reach him only through his perceptions, never directly. The permeability of this life space varies from one section to another, and therefore the person within the field develops somewhat unevenly, by "vectors." There is no need here to present the special vocabulary and concepts needed to explain vector psychology. In essence, this approach to personality de-emphasizes the importance of both heredity and maturation, and sees change and development as occurring mostly through the increasing variety, mobility, and reorganization of factors in both the individual and the life space. It is not difficult to see that Lewin

has made a number of basic assumptions of somewhat dubious nature, but at least his work has stimulated a good deal of research and debate.

Others have also tried, in a somewhat different manner, to reduce the enormous mass of human behavior to manageable units, one great stumbling block to the appraisal of human behavior has always been that there was altogether too much of it!

The factor-theorists—Cattell especially—have developed a psychometric approach to the problems of personality. They feel that test scores which measure specific abilities or interests can yield comprehensive information

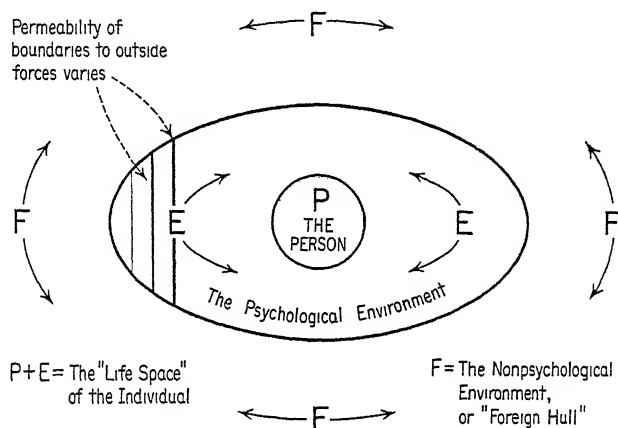


Fig 93 *General Structural Concepts of Personality*

Based on K. Lewin, *Principles of Topological Psychology*, McGraw-Hill Book Company, 1936, p. 73

about human personality, provided one applies the tests to a large enough range of human beings. According to this approach, the structural elements of personality are traits, which are often divided into "source" and "surface" traits, the former being constitutional and the latter being produced by environment. These traits are derived from tests rather than from theoretical considerations and are arrived at by consideration of life records, self-ratings, and test results, plus statistical analysis. Certain traits appear to be reliably present in all individuals, since they were found in large numbers of test subjects, and tend to occur more often than not in clusters. This purely empirical approach has its advantages in that it does not rest wholly upon anyone's preconception of what personality consists of, but it also has its limitations. It probably measures chiefly surface traits, although tests might be constructed that would measure source traits as well, and it is inevitably limited in scope to its own findings. If the tests actually measure *all* possible human traits, the statistical handling of the results

might be expected to make a real contribution to the theory of personality, but to date the tests probably do not measure more than a few possible components—and no amount of jumping through statistical hoops will make a trait appear unless it was measured by the test in the first place. Moreover, this approach suffers from the difficulty that is inherent in all analyses: it is often easier to take something to pieces than to put it back together again. It remains to be seen to what extent test results can be synthesized to give a coherent picture of the totality of human personality.

Possibly the strongest voice raised at present for consideration of the uniqueness of the individual personality is that of Gordon Allport. He is suspicious of any values to be obtained by transferring the statistical and objective techniques from other scientific fields directly to investigation of human complexity, especially at present, since the factors are too dimly understood to be suitable for rigid analysis. He swings to the other extreme of possible approaches and insists upon the special, richly-proliferating, and essentially inseparable characteristics of each individual personality. He is interested primarily in function and change, and he does not believe that there is a consistent self or ego that endures from birth to death. He is a strong champion of the normal human personality as a consciously developing goal-oriented, insightful individuality which passes through a number of recognizable but not rigidly fixed stages. This point of view provides a good balance for other types of approach that are focused either upon abnormal personalities or upon interpretation of statistical results.

From the number of men and women now writing on the subject of personality or investigating some phase of it, the writers have selected two who differ from each other in their basic concepts—Kurt Goldstein and Eric Fromm. It would be only confusing to present more, and these two will serve to point out the great range of interpretation possible in the field.³

Goldstein, a neuropsychiatrist, inclines strongly to emphasize bodily structure and physical maturing as the basic elements in personality. According to his organismic theory, the normal organism realizes itself as an interrelated, initially organized combination of physical and psychological forces working together to produce personality. In the process, the personality is involved with the environment, since it steadily tends to adapt itself to its surroundings or to control the outside world to meet its own inner needs. To study the nature of this development, the organismic theorist concentrates intensively upon the individual. The figure-ground relationship is a basic concept, which proposes that there are "natural" figures embedded in the personality but flexible and adaptable to the ground in which they grow. As the whole personality develops, the inherent qualities

³ The student who is interested in reading further might find it valuable to look into the work of Alfred Adler, Gardiner Murphy, W. H. Sheldon, Harry S. Sullivan, and Karen Horney.

of its personal pattern will emerge through a maturation process which is concomitant with the biological maturation taking place. However, if the environment presents problems too great for the natural pattern to overcome, other patterns of response may develop in defense. These are highly inconsistent with self-realization and may therefore prevent full, natural maturation. Such a theory does not seem to make sufficient provision for environmental effect or for the influence of cultural differences from one background to another, and it pays little attention to the learning processes.

At the other end of the scale is a group of psychologists and sociologists who are highly concerned with the effects of environment upon human personality. Most of these theorists accept a basically psychoanalytic viewpoint as to the construction and dynamics of personality, but each one has added or modified the central theme in terms of his own view of the interrelationship of heredity and environment.

The environmentalist studies personality by tracing the development of individuals throughout their entire life span, to observe the growth of the given biological potentials into the mature personality. The personality is presumed to start with a few inherited elements but to grow mainly through its environmental contacts. Eric Fromm is a good representative of this school of thought. He assumes that *only* through social contacts can a human being satisfy his basic needs. He sees the creative possibilities of the individual as inseparable from those of his fellow men, and relatedness as the essential quality of human needs, because men do exist in societies and cannot realize their possibilities or their identities except as their culture permits these developments. Variations in culture therefore automatically produce variations in personality and also condition the acceptance of personality.

There are, thus, many theories and many approaches, all differing at least in some respects from each other. Probably no theorist denies the presence of some inherited features in the pattern of personality, and presumably none disregards environmental forces altogether. The differences consist partly in the relative weight given the various possible components, partly in the extent to which the patterns are considered as resulting mainly from internal growth or from external pressures, and partly in the degree of purposefulness assumed to be inherent in the developing personality.

The main purpose of the above presentation has been to provide a background for a better understanding of the widely used tests of personality that will shortly be described. Table 24 is included as a summary of the foregoing discussion. In it the various theorists are rated as to a number of points about their theories of personality. It may be seen that there is great variation. What one stresses, another may ignore. This great diversity arises to some extent from the differences in the personalities and life

Table 24 COMPONENTS OF VARIOUS THEORIES OF PERSONALITY

	<i>Heredity</i>	<i>Early Developmental Experiences</i>	<i>Organismic Emphasis</i>	<i>Unconscious Determinants</i>	<i>Psychological Environment</i>	<i>Field Emphasis</i>	<i>Learning Process</i>	<i>Group Membership Determinants</i>	<i>Continuity of Development</i>	<i>Purpose</i>	<i>Personality Structure</i>	<i>Self Concept</i>	<i>Uniqueness</i>
Freud	H	H		H	H	L	L	L	H	H	H		
Jung	H		H	H		L	L	L	L	H	H		
Murray		H	H	H	H	H	L		H	H	H		
Lewin	L	L	L	L	H	H		H	L	H			H
Cattell	H		L		L	L	H				H	H	
Allport		L	H	L		L		L	L	H	H	H	H
Goldstein		L	H	L	H			L	L	H	L	H	L
Fromm								H		H			

H — high (emphasized) L — low (unemphasized)

Based on C S Hall and G Lindzey, *Theories of Personality*, John Wiley & Sons, 1957, p 546

experiences of the theorists. A clinician does not see the same things in human nature that a neurologist sees, nor the same things that are obvious to a statistician, a social scientist has a still different approach. It is as if "Man" in the abstract were a picture at which each theorist looked and in which he saw only what his personality permitted him to see. Among these various explanations the reader should be able to find at least one that fits his own outlook on life.

Tests of Personality

Various people have constructed tests of one kind and another for the purpose of measuring at least a few facets of personality. Some theorists have made tests in order to get further light on their assumptions, in other cases, a psychologist who was more or less influenced by a given school of thought has constructed a test that in his opinion might eventuate in something interesting, although he often does not seem to have known just what! Since this type of test is so new, comparatively speaking, none of them is as yet too well authenticated, although all are of interest and all give some kind of information about personality. The main difficulty in their use is that the score has to be interpreted, as it stands, it often means nothing. A copy of a given pupil's test may be sent to five "experts" for interpretation, with the resulting assembly of five more or less divergent opinions. The source of the variation is the indirectness of the measurement. One cannot measure personality directly, as a doctor determines

blood pressure or bodily temperature, but indirectly, as a doctor observes symptoms and diagnoses disease. Any two doctors will agree, within the narrow limits of error in making the measurement, on what a patient's blood pressure is on a given day because the measurement is direct and objective, but they may not agree in the least upon what disease he has, because a diagnosis is a subjective inference. So also is a diagnosis of personality.

Attempts to measure specific traits began some four decades ago. The tests are of numerous types, each of which has its merits and its shortcomings. The earliest forms consisted of questionnaires, inventories, and life histories. In all three of these the individual gives evidence about himself, usually in answer to specific questions. The most obvious shortcoming of this approach is that it rests upon the test taker's unsupported, subjective report.

For instance, a young man says—either orally or in answer to a written question—that he has never had a girl friend. There is no easy way of checking this statement. He may have different standards from other people's as to when a feminine acquaintance should be classified as a girl friend, he may have forgotten some experiences, or he may be lying, intentionally or unintentionally. Moreover, he obviously cannot tell what he does not know. In many instances his own explanations of his motives may not be correct because his true motives are unconscious. If he has a mother complex, for example, he probably does not know it. In short, any form of direct verbal or written inquiry has all the disadvantages of any subjective mode of inquiry. It does, nevertheless, often contribute to an understanding of personality as the taker of the test sees himself.

A second type of personality test consists of measures that are somewhat more objective than the inventory or questionnaire. The earliest form, the rating scale, supplements an individual's opinion of himself by the ratings other people make about him. The rating scale is, however, a somewhat unreliable instrument, even under the best of circumstances, perhaps because one person's opinion of another is not notably accurate. In one modified form, called the "Guess-Who" Test, the estimate is fairly reliable and very useful. More will be said about this type of test presently. Another kind of objective test consists in presenting a pupil with a life situation in which he does not know he is being tested or observed, and in recording what he does. Thus, in an investigation of a single trait, such as honesty, one can give a pupil a chance to steal money and see if he does so. This technique is limited in its application, but has a convincing reality where it can be used at all.

Some of the more recent tests are of the so-called projective type. They merit this name because the individual taking the test unconsciously reads

into the materials his own life experiences and attitudes. That is, he projects himself. The theory underlying such tests is that the ego habitually thrusts onto the external world its own unconscious wishes, if these were ever to become conscious, they might be most painful, so they are disowned and attached to something or someone outside the self. If, then, a pupil is presented with a set of materials that give him a chance to project his attitudes, he will follow his customary pattern of response and do so. For instance, if the examiner shows a child a picture of a woman crying (but with no clue in the scene as to why she is crying) and asks what the picture is about, the child has to project into his narrative his own reasons for crying or his own idea of other people's reasons. Whatever he says, he is going to reveal something about himself. Or, he may be presented with a series of puppets and asked to select a family from them. His selections and his rejections, the reasons he gives for either, and his arrangement of his puppets are all significant because he is almost certain to project into his selection his feelings toward his own family. The materials used are of many types, but the underlying idea is the same—that the taker of the test will reveal himself by his reactions. The difficulty in the use of such materials lies in the interpretation. If, for example, a child selects a family of puppets without any mother, especially if he has one himself, this rejection of the motherlike puppets indubitably means something. It probably indicates an unconscious conflict of so disturbing a nature that even the idea of a mother has been repressed. Further play may give some clue as to the underlying attitudes.

It will be noted that each kind of test contributes some element that the others do not. A comprehensive series of questions honestly answered will tell what the test taker thinks of himself, any form of rating scale may add pertinent information as to what other people think of him, a projective technique will give him a chance to reveal the things that are disturbing him and to some extent the structure of his personality. All three kinds thus have their uses.

One warning about certain personality tests should perhaps be given. Some of them were devised for the express purpose of revealing which individuals have at least the beginnings of an abnormal personality. The items were therefore selected as covering the common symptoms of those who are neurotic or psychotic. As a result, one cannot make a "normal" score on these tests because the items are not based upon acceptable personalities. By no means all tests are of this type, but the user should be forewarned that such tests exist.

Questionnaires and Inventories: There is no room in a book about adolescence for more than a sampling of each type of measuring instrument. No effort will be made to present a survey of the field. Two questionnaires are especially well known—the Minnesota Multiphasic Personality Inventory

and the Allport Ascendancy-Submission Scale⁴ A few items from each will serve as examples

- 2 Is it hard for you to be calm when things go wrong?
- 22 Are people often unfair to you?
- 34 Do you feel that you are punished for too many little things?
- 54 Are you usually invited to school and neighborhood parties?
- 67 Have you often felt that older people had it in for you?
- 88 Do you usually find it hard to go to sleep?
- 116 Do you find it easy to make new friends?
- 141 Do your folks seem to feel that you are interested in the wrong things?
- 156 Are some of your teachers so strict that it makes schoolwork too hard?
- 179 Do you like most of the boys and girls in your neighborhood?

As may be seen, the test covers a wide range of topics The Minnesota Test is so arranged that its scores fall into patterns which reflect presumed basic groupings of personal traits It is used primarily to indicate those students who deviate from the normal The patterns are therefore patterns of abnormal personalities—the paranoid, the schizophrenic, the depressed, or the hysteric Like all inventories, it is intended for use in surveying and sifting entire groups That it has some diagnostic quality as well is an added attraction

The second scale of this type—the Allport Ascendancy-Submission Scale—contains such items as these:

- 9 Do you feel self-conscious in the presence of superiors in the academic or business world?
markedly_____ somewhat_____ not at all_____
- 26 When an accident occurs where many people besides yourself are present do you usually
take an active part in assisting_____
- take the part of a spectator_____
- leave the scene at once_____

This series of questions permits a qualified answer, rather than merely a Yes-No response. Its scope is limited to a certain phase of personality, to be sure, but like other such instruments, it does give clues

Questionnaires and inventories are not substitutes for personal interviews but are of value as preparatory steps toward interviews They serve also to call attention to those pupils who are most in need of help

Rating Scales: A good and fairly recent example of a rating scale is the Guilford-Zimmerman Temperament Survey⁵ It consists of ratings upon

⁴ See, for instance, R J Hampton, "The MMPI as a Psychometric Tool for Diagnosis of Personality Disorders among College Students," *Journal of Social Psychology*, 26 99-108, 1947, M S Gould, "Teacher Prognosis Scale for the MMPI," *Journal of Educational Research*, 49 1-12, 1955

⁵ J P Guilford and W S Zimmerman, *The Guilford-Zimmerman Temperament Survey*, Sheridan Supply Company, 1949

ten traits of personality

- 1 General activity, energy, drive
- 2 Restraint, self-control
- 3 Ascendancy through persuasiveness and power of conversation
- 4 Sociability, making of friends, social contacts
- 5 Emotional stability lack of moodiness, optimism, composure
- 6 Objectivity lack of hostility or suspiciousness
- 7 Friendliness acceptance of domination, responsibility for others, tolerance of hostility
- 8 Thoughtfulness reflectiveness, interest in thinking
- 9 Tolerance of others, freedom from self-pity
- 10 Masculinity interest in masculine activities, not easily frightened or disgusted

To use this or any other rating scale, one rates each individual on each trait or complex of traits and then usually makes a profile, which gives at least a suggestion of personality, although it still remains to interpret the profile!

The profile in Figure 94 illustrates the use of the California Test of Personality⁶. It shows the ratings of a thirteen-year-old girl as made out by her teacher. A brief history appears below.

Jane is a young adolescent who feels very secure in the place she holds as the elder of two children in a fairly stable middle-class family. She appears to feel somewhat limited in her sense of personal freedom, possibly because she has had a great deal of responsibility for the care of her younger brother while her mother worked in the evenings to supplement the family income and to maintain a rather overstressed social position. Jane's responsibilities have, however, given her a solid sense of her value in the family. She does not seem disturbed emotionally, but she does sometimes sigh deeply in the manner of a person who is overburdened. Her social skills are relatively low, presumably because she has had little time for being with her age-mates. Also, the family standards are rather high, and she may feel that she cannot reach them and has reacted negatively by not trying. School relations are less satisfactory than those within the family, but mostly because she does not seem interested in putting much energy into them and partly because she has a slight tendency to reject the friendly advances of others girls. Jane's family has few contacts in the community, and Jane reflects this same isolation in the absence of such contacts as would be furnished by membership in clubs, and the like. She does not go to public parks, draw books from the public library, or otherwise avail herself of public facilities. Jane shows a fairly good capacity for dealing with her own feelings and problems, but she should be watched to guard

⁶ See, for instance, E. W. Tiegs, W. W. Clark, and L. P. Thorpe, "The California Test of Personality," *Journal of Educational Research*, 35 102-108, 1941; O. C. Scandrette, "Classroom Choice Status Related to Scores on Components of the California Test of Personality," *Journal of Educational Research*, 47 291-296, 1953; G. T. Curran, "The Effect of Immediate Experiences upon the Responses in the California Personality Test," *Journal of Educational Research*, 48 289-295, 1954.

against further tendencies toward withdrawal, and she should be encouraged to join a few school clubs. Possibly desirable would be a family conference to discuss relieving her of enough home cares to leave her more free time.

COMPONENTS

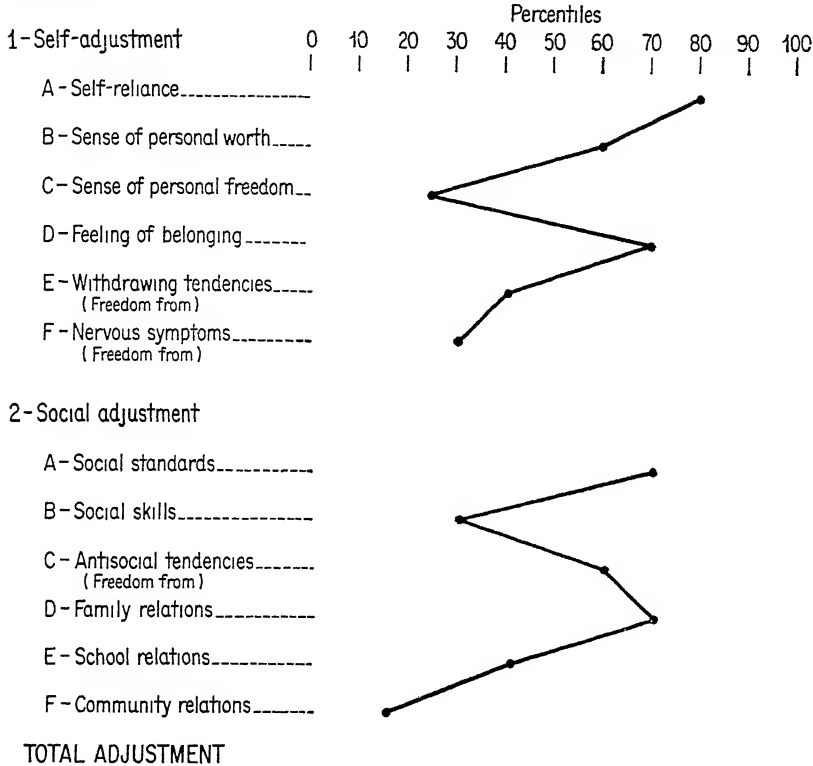


Fig. 94 Rating Scale

The "Guess-Who" Test is an indirect sort of rating scale. It has many forms, of which the items below are examples.

1 In this class there is a pupil who does good work, is very bright, and recites a lot in class, but isn't popular, and sometimes tells on the other children. Who is it? _____

2 In this class there is someone the other pupils think is a "screwball." Who is it? _____

3 There is another pupil who stays alone a good deal, seems to be half-asleep much of the time, and often doesn't hear what the teacher says. Who is it? _____

4 Two pupils, one a girl and one a boy, are very popular. All the other children like them and often crowd around them on the playground. When partners are being chosen everyone wants these two as partners. Who are they? _____

5 Suppose your class was giving a play and you needed the following characters, which child would you choose for each?

- | | |
|---------------------|------------------|
| a a sissy _____ | d a sneak _____ |
| b a tough guy _____ | e a leader _____ |
| c a show-off _____ | f a bully _____ |

The pupils who take such a test are rating their comrades, sometimes on only a single trait, sometimes on their total personality. By using this test a teacher can avail herself of much information that the children have about each other and can identify those pupils who are most in need of mental hygiene because of their unsatisfactory relationships with their age-mates.

Projective Techniques There are so many tests of this type that only a few of the most widely used can be discussed. Those selected for the main consideration are the Sentence-Completion Test, the Picture-Frustration Test, the Thematic-Apperception Test, and the Rorschach. In the final paragraphs of this section there will be briefer mention of several others that contribute still further possible approaches to the investigation and evaluation of personality.

The sentence-completion form of projective test is by far the simplest to understand. It consists merely of such sentences as these

- 1 I feel hurt when _____
- 2 I object strenuously to _____
- 3 I often make believe that _____
- 4 My father used to _____
- 5 I liked one teacher in high school because she _____
- 6 The people I dislike most are those who _____⁷

Each introductory clause presents the student with a situation for which he must supply a conclusion, presumably by telling what he would do, or customarily does, in similar circumstances. No two people are likely to complete the sentences in the same way. Incomplete sentences of the types listed above require an individual to project his own personality into the finishing of the sentence.

The Picture-Frustration Test⁸ is another one that presents the taker with a situation and asks what he would do about it. The test items are in the form of cartoons, each depicting a scene in which two people are involved. The scenes are of a more or less provocative nature. One of the two

⁷ A. D. Tendler, "A Preliminary Report on a Test for Emotional Insight," *Journal of Applied Psychology*, 14 123-136, 1930, and J. Shor, "Report on a Verbal Projection Technique," *Journal of Clinical Psychology*, 2 279-282, 1946.

⁸ S. Rosenzweig, *Psychodiagnosis: An Introduction to Tests in Clinical Practice of Psychodiagnosis*, Grune & Stratton, Inc., 1949, 380 pp., R. P. Falls and R. R. Blake, "A Quantitative Analysis of the Picture Frustration Study," *Journal of Personality*, 16 320-325, 1948, J. Bernard, "The Rosenzweig Picture-Frustration Study I and II," *Journal of Psychology*, 28 326-332, 333-344, 1949.

people has already made a remark, which is recorded as coming from his or her mouth, after the fashion of the comic strips. There is a similar but empty space in which the test taker is to write in what answer the second person might make to the entire situation

One of the cartoons, for instance, shows a most exemplary taxicab driver leaning out of his cab window and apologizing for splashing mud on a pedestrian's clothes. The possible answers by the pedestrian may be grouped into three types: those that put the blame on the taximan, those that put the blame on the pedestrian himself, and those that put it on what Sir Henry Merrivale calls "the awful, terrible cussedness of things in general." Of the first type are such answers as "Why don't you watch what you're doing?" or "People like you ought to be locked up." Of the second type: "Oh! that's OK! The suit's dirty anyway," or "I shouldn't have been standing so close to the curb." Of the third type: "Well, I suppose accidents will happen," or "On wet days you can't keep water from splashing." The first kind of answer is called extrapunitive, that is, the blame is assigned to someone or something outside the speaker, whose aggression is directed into the environment. The second type is called intrapunitive, that is, the speaker accepts the blame, thus turning his aggression in upon himself. The third is called impunitive and represents an effort to mask the frustration, to de-emotionalize the situation, and to evade any aggression at all. These different reactions to the same series of situations seem to be related in varying degrees to such traits of personality as dominance, neuroticism, scholastic aptitude, or religious interest.

Of all the projective techniques, the Thematic Apperception Test⁹ and the Rorschach are the best known and most widely used. In 1950, the former—usually known as the TAT—had already been the subject of 377 articles in professional journals,¹⁰ and twice as many more have appeared since. The test consists of a series of pictures, each of which shows a dramatic or emotional scene that might have a number of explanations. The individual who takes the test is asked to explain the picture and to give an imaginary reconstruction of what went before and what followed. Although a good deal of emotion is portrayed in each picture, it is not clear just what the excitement is all about. Thus, a man may be shown pointing excitedly toward something but there is no clue as to what he is pointing at. The subject must therefore read into the pictures some fantasies or inter-

⁹ For a description of this test and the methods of scoring it, see the following articles: B. Aron, *A Manual for the Analysis of the TAT: A Method and Technique for Personality Research*, Willis E. Berg, Berkeley, Calif., 1949, 163 pp.; L. J. Lindzey and S. H. Hennemann, "Thematic Apperception Test: Individual and Group Administration," *Journal of Personality*, 24: 34-55, 1955; Z. A. Piotrowski, "A New Evaluation of the TAT," *Psychoanalytic Review*, 37: 101-127, 1950; M. I. Stein, *The Thematic Apperception Test*, Addison-Wesley Press, 1948, 95 pp.

¹⁰ R. R. Holt and C. Thompson, "Bibliography for the Thematic Apperception Test," *Journal of Projective Techniques*, 14: 82-100, 1950.



Fig 95 *TAT Picture (1)*

From P. M. Symonds, *Adolescent Fantasy*, Columbia University Press, 1949, No. 17. Used by permission of the publisher.

pretations of his own. In giving meaning to the picture, a person is certain to reveal something about himself. The raw material for a pupil's story comes from his own experiences and is colored by his own personality needs. His stories are scored for evidence of basic, unsatisfied urges and for environmental pressures. The nature of the outcome is also examined, since it is a product of the needs and the pressures, and is rated as a successful or an unsuccessful solution.



Fig 96: TAT Picture (2)

From Symonds, *op cit*, No 28 Used by permission of Columbia University Press.

One of the most interesting and valuable studies using the TAT consists of the administration of 42 cards to 20 adolescent boys and 20 adolescent girls¹¹ Two of the pictures are reproduced in Figures 95 and 96 These children told a total of 1,680 stories The investigator collected a complete life history of each pupil, also an autobiography written by the

¹¹ P. M. Symonds, *Adolescent Fantasy: An Investigation of the Picture-Study Method of Personality Study* Columbia University Press, 1940, 297.

pupil himself, ratings from teachers, results from questionnaires concerning such matters as likes and dislikes, or relations to family and age-mates, a record of each pupil's dreams, and several observational samples of behavior. The investigator thus had a great deal of information about each adolescent, to which he could relate the stories stimulated by the pictures.

The first point about the results has to do with the themes of the stories. These are of two types, environmental and psychological. Both types exist for every story, that is, a story can be about school life and show aggression, or about family relationships and show ambition, or about punishment and show repentance. Usually, a story had more than one theme, the 1,680 stories produced a grand total of 4,804 environmental and 5,499 psychological themes. Both numbers include repetitions. The themes that made up 88 and 87 per cent, respectively, of the two types are listed in Table 25.

Table 25 THEMES

<i>Environmental</i>					<i>Psychological</i>				
	Num- ber	Per cent	Rank Order			Num- ber	Per cent	Rank Order	
			Boys	Girls				Boys	Girls
Family relationships	1,595	33	1	1	Aggression	1,562	28	1	1
Economic conditions	632	13	3	2	Eroticism	459	8	2	4
Punishment	614	13	2	5	Altruism	401	7	5	2
Separation or rejection	397	8	5	3	Depression	349	6	6	5
Accident or illness	297	6	4	6	Excitement	312	6	3	10
School	251	5	6	4	Anxiety	310	6	8	3
Peer social life	130	3	8	7	Repentance	305	6	4	9
Strangeness	125	3	7	10	Ambition	268	5	7	8
Place of residence	98	2	9	9	Thinking, decision	248	5	9	6
Appearance	75	2	—	8	Joy, happiness	193	4	11	7
					Escape	136	2	10	—
					Concealment	119	2	13	11
					Goodness	112	2	12	12
Total	4,214	88	—	—	Total	4,774	87	—	—
All Others	590	12	—	—	All Others	725	13	—	—
Grand Total	4,804	100	—	—	Grand Total	5,499	100	—	—

From P. M. Symonds, *Adolescent Fantasy*, Columbia University Press, 1949, pp. 80-81. Used by permission of the publisher.

The first three environmental themes equaled 59 per cent of the total. By far the commonest psychological theme was aggression. There was no adolescent among the 40 studied who did not have some aggressive themes in his or her stories. The chief differences between the rank order of envi-

ronmental themes for boys and girls was that the former told relatively more stories about punishment, accidents, and strangeness, while the latter told relatively more about separation or rejection, school, and appearance. In psychological themes, the boys show more motifs reflecting eroticism, excitement, repentance, ambition, and escape than the girls, but fewer motifs concerning altruism, depression, anxiety, thinking, joy, and concealment. The escape theme occurs so rarely among girls that it is not among the first thirteen, its place is taken by the theme of guilt or conscience.

The individual stories told by the boys and girls are interesting and revealing. The few quoted below illustrate a number of themes and show what the raw material as produced by adolescents looks like. The last two were told about the same picture by two different boys.

Story A (Aggression)

This boy's father had died twenty years ago, when he was one. The boy is now 21. Father left insurance. Boy got a car. Decided to show it to mother. Drove it 80 miles per hour. Sped along. Saw old woman coming out on street. Hit her. Drove home. Screamed "Mother, Mother." Realized it was his own mother. Rushed back to street of accident. She was dying and said she hoped he wouldn't be so mean after this. She died. He went to jail and got life imprisonment.¹² (Harold, age 13, story 22)

Story B (Depression)

Appears as if woman receiving letter is expecting bad news. Look in face doesn't seem to indicate any enthusiasm in receiving letter. Seems as if she's in a different world, the look in her eyes. Seems her taking letter was just a mechanical motion. Woman is very ordinary looking and looks more like secretary than housewife. Perhaps her boy friend has written her that due to financial conditions and the tie-up in work they cannot be married for at least a year. She had an inkling this would happen because of his actions in recent weeks. She feels, perhaps, he doesn't love her any more and is merely using that as an excuse to break off. I don't feel they ever will get married. (I am awfully pessimistic). Girl will never forget him. (Albert, age 17, story 1)

Story C (Altruism)

Teachers planning annual festival at school. In one class two girls were being considered for a large part. Girls were different. Sue was gentle—wanted part, but would give it up gladly. Mary—just the opposite—very bitter about it. Didn't know what to do. Teacher chose Sue. Sue very glad. Mary bitter over it. Resolved she would make it difficult for Sue. Sue noticed this. Gave part to Mary. Knew she wanted it. When Sue went to see festival felt good because she knew through her sacrifice she had made someone else happier. Had a pang of envy. But felt in the end that she had done a better thing. (Viola, age 14, story 41)

¹² This and the following excerpts are from Symonds, *op cit*, pp 85, 84, 85–86, 85, and 86, respectively. Used by permission of Columbia University Press.

Story D (Guilt)

Boy's name is John Mother a widow He got in trouble in school Mother had to go up to school Teacher told her he was fooling around too much in school He said he was sorry Here she's describing how her husband died Boy never knew this He was small Telling how big brother ran away because he didn't have enough money from mother Mother telling how much she'll have to depend on him when he's old enough to work He'll have to support her He's thinking over situation Promised not to get into trouble From then on, a good boy in school (Jack, age 15, story 17)

Story E (Ambition success, realization)

Young Johnny lived in New York City Pretty bad Bad reports Father dead Mother had to support him Wash woman One ambition that her one son would go to college Took him aside and talked to him He was smart, but never tried Now he did Great raise in marks Realized he could get scholarship Studied hard Mother helped Physics exam, psychology exam which they taught—an unusual subject, mother helped He also studied chemistry At first he thought it a lot of stuff Now realized there was something to it Gets scholarship Years later this young fellow is one of the greatest scientists ever and president of experimental scientific concern (Sam, age 14, story 17)

It will probably have been noted that these stories indicate the existence of conflicts, almost inevitably conflicts that are unsolved In general, if an individual works out a conflict in reality its nature is revealed by his behavior Thus a delinquent boy often acts out his conflicts, and the observer can deduce a good deal about them from the boy's symptoms If, however, an individual inhibits the outward expression of his conflicts, he works them out in fantasy, either openly or in disguised forms If the underlying drives are acceptable to both the child and society, the expression is usually open, but if they are unacceptable, they will be expressed through symbols and through displacement

No other projective technique is as old or as well known or as widely used as the Rorschach¹³ A mere list of the existing references dealing with it would fill an entire book It consists of a series of cards on each of which there is an irregularly shaped blotch of ink Five are in gray and black only, two have some red spots, and the last three have many colors The person taking the tests is merely asked, "What might this be?" He then reads his own interpretation into the blot by telling what he thinks it is

¹³ For good and not too technical discussions, see S J Beck, *Rorschach's Test*, Vol I, *Basic Processes*, 2d ed, rev., 1949, 227 pp., and Vol II, *A Variety of Personality Pictures*, 1945, Grune & Stratton, Inc., 402 pp., M R Harrower-Erickson and M E Steiner, *Large Scale Rorschach Technique*, Charles C Thomas, Publisher, 2d ed, 1951, 353 pp., H E Esenbach and E F Borghaia, "Testing Behavior Hypotheses with the Rorschach," *Journal of Consulting Psychology*, 19 267-273, 1955, E Crumpton, "The Influence of Color on the Rorschach," *Journal of Projective Techniques*, 20 150-158, 1956

The scorer notes not only the total responses, but also the number of associations given, their quality, type, and originality, the lack or the profusion of detail, reaction to the appearance of color, and so on. The person taking the test perceives in the meaningless ink blots only what his experiences have conditioned him to see, just as he bases the story he invents for each



Fig. 97: *Ink Blot Test*

picture in the TAT test upon his personal experiences, emotions, and reactions. In the latter case, however, he has some hint of meaning from the picture, whereas in the former he must supply all the meaning himself.

The ink blot in Figure 97 was not taken from any test but does show some of the features typical of the Rorschach, such as symmetry, differences in shading, and lack of any deliberately imposed content. This blot was shown to an eleven-year-old boy and a forty-year-old woman, although the "test" was not given with the carefully controlled procedure of actual testing; the answers illustrate what sort of responses one gets from this type of measurement.

Boy, age 11. It's a dog's head with a dark nose in the middle, or a whole bunch of flowers, [turning paper around] there's an oil well spouting, in the top

part, or it could be a gnaaffe in the jungle, [side turn] there are two little birds, each in a nest, or, if you think you're looking down on it from the top, it could be two geese in flight Just that very dark place in the middle looks like the silhouette of a kitten's head and shoulders

Woman, age 40 I don't know, it's sort of messy I guess an animal of some sort Maybe a real fancy hat with a long ribbon Looks silly to me

In spite of the casual administration of this item, the general pattern of production varies in somewhat the same way as in the real Rorschach, with great differences in the number of responses The boy responded freely to both large and small areas, turned the card about a good deal, and showed a rather special spatial sense in his reference to the geese in flight—an idea possibly derived from children's moving pictures of nature The woman showed much constraint and some resistance, probably she saw more than she said Her production is small in amount and lacking in detail, possibly a reflection of her limited education and background as well as of her personality The scoring of a properly administered Rorschach is far too complex to be explained here, and the interpretation—although there is some standardization—remains more of an art than a science In the hands of a skillful tester, however, the Rorschach can give fairly consistent and valuable information as to the structure of personality, especially in its unconscious elements

Several other techniques may be mentioned briefly The Szondi Test¹⁴ presents the subject with forty-eight photographs of mental patients—six each of eight “types”—from which he chooses the ones in each set that he likes best and likes least Szondi's own theory concerning the test is highly elaborate and does not seem related to the facts, but the test does appear to have value The users believe the choices reflect both the subject's basic tensions and the manner in which he is handling them

The Mosaic Test¹⁵ is a projective technique of quite another type The materials consist of 456 small pieces of flat, colored, geometrically shaped bits of wood or plastic The person who takes the test may arrange the pieces into any kind of pattern he likes A few sample results appear in Figures 98 and 99 The patterns are scored for their coherency, their completeness, their use of color, their symmetry, their conceptual basis, and the arrangement of the spacing

Sample A in Figure 98 shows an incoherent pattern that is compact, Sample B is an equally incoherent effort that is spaced By contrast, in Figure 99 are Samples C and D The former is simple, symmetrical, com-

¹⁴ S. R. Deri, “The Szondi Test,” *American Journal of Orthopsychiatry*, 19 447–454, 1949, and S. R. Deri, *Introduction to the Szondi Test Theory and Practice*, Grune & Stratton, Inc., 1949, 354 pp

¹⁵ M. Lowenfeld, “The Mosaic Test,” *American Journal of Orthopsychiatry*, 19 537–550 1949, and H. Doerken, “The Mosaic Test—A Second Review,” *Journal of Projective Techniques*, 20 164–171, 1956

plete, and unspaced, the latter is well spaced, relatively complex, well planned, complete, symmetrical, and original. The individuals who produced A and B were either mentally defective or in a state of considerable disorganization. C and D were produced by normal people, but the con-

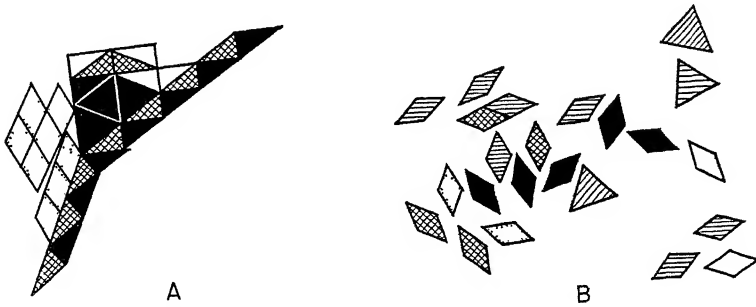


Fig 98 Results from the Mosaic Test (1)

From M. Lowenfeld, "The Mosaic Test," *American Journal of Orthopsychiatry*, 19: 537-550, 1949. Used by permission of the publisher. The items for this figure and for the next were selected from Figures 2-6.

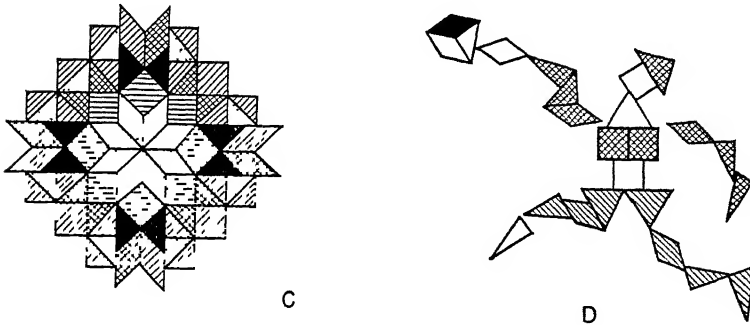


Fig 99 Results from the Mosaic Test (2)

From Lowenfeld, *loc cit*

ventionality and cramped arrangement of C suggest a different personality from the creator of the free, lively figure shown in D.

One relatively new projective test seems worth presenting because it has a somewhat different approach.¹⁶ The pupil is given a series of symbols such as those in Figure 100 and is asked to draw pictures using the symbols as bases. He then tells how well he likes each, what mood it represents, and so on. The materials are simple but they provide adequate stimulation

¹⁶ J. Krout, "Symbol Elaboration Test," *Psychological Monographs*, Vol. LXIV, no. 310, 1950, 88 pp.

for most people to reveal their central problems through the associations they read into the symbols

Various other approaches have been tried—making a simple drawing of a man or of one's whole family,¹⁷ giving reactions to tones¹⁸ instead of to pictures, doing finger-painting or other creative art work, or using play techniques, such as furnishing a pupil with a number of dolls to represent members of the family and noting what he does with them. Such activities have the great advantage of not seeming to be tests at all. Yet the child who stands the mother-doll in the middle of his stage, groups all the children-dolls around her—with some of them perhaps leaning against her—and forgets the father-doll altogether is revealing a good deal about the kind of home atmosphere he lives in.



Fig. 100 *Projective Test Using Symbols*

Based on J. Krout, "Symbol Elaboration Test," *Psychological Monographs*, No. 310, 5-11, 1950

Finally, mention should be made of the diagnostic uses of psychodrama. A few children, adolescents, or adults are sent onto a life-size stage, and one of them is asked to decide what role he wants to take and just who he wants the others to be. Then he decides what scene is to be played. The main actor has already revealed quite a bit about himself in his choice of roles and topic. He and the others then develop the scene by whatever each thinks is appropriate dialogue. As the scene unfolds, the others also project themselves and their problems into it, and a good deal of revelation takes place. As with other methods of assessing personality or personal problems, there is the difficulty of interpreting the reactions. Since only the rough outline of this procedure can be standardized, it is a difficult technique for the inexperienced and untrained.

There are, thus, as many different approaches to the measurement of personality as there are theories. Presumably each type of test measures something about the complex of traits usually thought of as personality, but thus far no single test gives a comprehensive picture. Several of them do result in profiles that suggest certain neurotic or psychotic structuring of personality.

¹⁷ K. Machover, *Personality Projection in the Drawings of the Human Figure*, Charles C. Thomas, Publisher, 1949, 181 pp.

¹⁸ D. R. Stone, "Recorded Auditory Apperception Tests: A New Projective Technique," *Journal of Psychology*, 29: 349-353, 1950.

Types of Personality

There have been many efforts to classify people into types. The trouble has always been that after an investigator has selected from the population those who, upon any basis, may properly be grouped together, he still has a great many individuals left over who do not fit into any category. Indeed, these "mixed" types are so numerous as to arouse some doubts as to the practical value of "typing." However, it seems desirable to present two samples. The first is based upon statistical analysis, the second upon observation.

As soon as one begins to interrelate measurements of separate traits it becomes evident that certain constellations or clusters appear often. Each cluster presumably represents a group of characteristics that coalesce to form a type of personality. One type may share some traits with others, to be sure, but each constellation appears as a unit often enough to suggest its being regarded as distinct. The number of such clusters, as well as the particular selection of characteristics, varies with the nature and extent of the data used by an investigator, and with his method of handling them. One investigator¹⁹ has found twelve primary trait clusters which he feels suggest definite and recognizable types of people. Four samples appear below:

- Unit 1* arrogant, exhibitionistic, talkative, boastful, argumentative, conceited, stubborn, pugnacious, tactless, rigid, hostile, ruthless, egotistical, acquisitive, blames others, is unkind to inferiors, flatters superiors
- Unit 2* thoughtful, wise, original, constructive, intelligent, independent, persevering, reliable, mature, planful, analytical, versatile, orderly, cultured
- Unit 3* naive, modest, submissive, grateful, tolerant, peaceable, childlike, gentle, self-effacing, self-distrustful, self-dissatisfied, quiet, dependent
- Unit 4* impulsive, changeable, thoughtless, playful, careless, wasteful, frivolous, humorous, lively, vivacious, foolish, unenquiring, amusing, entertaining

In common speech, persons having these groups of traits are dubbed the braggart, the scholar, the wallflower, and the playboy.

One fairly recent study consisted of an intensive analysis of all the sixteen-year-old boys and girls in a single town.²⁰ These adolescents were studied by means of numerous questionnaires, tests of aptitude and personality, check lists, ratings, self-estimates, measurements of popularity and social status, personal interviews, and so on. Five definite personality types emerged. The outstanding traits of each type appear in Table 26. These

¹⁹ R. B. Cattell, "The Principal Trait Clusters for Describing Personality," *Psychological Bulletin*, 42: 129-161, 1945.

²⁰ R. J. Havighurst and H. Taba, *Adolescent Character and Personality*, John Wiley & Sons, Inc., 1949, 315 pp.

Table 26 TYPES OF PERSONALITY

<i>Self-directive Personality</i>	<i>Adaptive Personality</i>	<i>Submissive Personality</i>	<i>Defiant Personality</i>	<i>Unadjusted Personality</i>
Ia Personal traits (positive) ambitious, responsible, orderly, persistent, introspective	outgoing, confident, sensitive to environment, good adjustments, no observable fears or anxieties			
Ib Personal traits (negative) self-doubt, self-criticism, some anxiety, some aggressiveness, low in warmth	submissive	timid, lacks initiative, stubborn, self-doubting, self-critical, lacking in aggression		dissatisfied, complaining, feelings of insecurity, occasional aggressiveness
IIa Social traits (positive) leadership, activity in school affairs	very popular, active in student affairs, social skills well developed, popular with opposite sex, self-assured, no family conflicts, permissive home training, high ratings in friendliness, tends to move toward others	no conflict with family, slight tendency to move toward others		
IIb Social traits (negative) some conflict with family, strict home training, awkwardness in social skills, tends to move away from others		always a follower, a non-entity, awkward in social skills, very strict home training	unpopular, hostile to school activities, moves against people, family training inconsistent, neglect, much conflict with family	any level from low to high

IIIa Intellectual traits (positive)					
average to high intelligence, better schoolwork than IQ would indicate	average to high intelligence			any level from low to high	schoolwork lower than level indicated by IQ
IIIb Intellectual traits (negative)					
	schoolwork sometimes lower than expected	low to average intelligence, schoolwork corresponds to IQ		schoolwork lower than level indicated by IQ	
IVa Moral traits (positive)					
high ratings in character (especially in honor and responsibility), concern about morals, moral attitudes not rigid, high standards	good ratings in honor and responsibility	average to good ratings in honor and responsibility			
IVb Moral traits (negative)					
	adopts current standards without thinking, moral standards uncertain	uncertain of moral standards and attitudes		low character ratings except on courage, moral standards and attitudes low	low to average ratings in character, low to average moral standards and attitudes
V Methods of gaining security					
gains security through achievements	gains security through relations with others	gains security through submission to authority		gains security through personal hostility to authority	does not gain security

types include 66 (58 per cent) of the 114 adolescents who were sixteen years old during the year of the study. The remaining 48 showed presumably mixtures of traits from at least two of the types enumerated.

The fundamental trouble with the classification of personalities has always been that the human animal is a highly complex and sensitive organism that continues to modify itself as long as it exists. Even if an individual starts with a basic type of personality, life soon pokes in a dent here and puffs up a bulge there. Moreover, any human being has many contradictory drives, such as the desire to be dominating and the desire to be submissive, but these competing tendencies are stimulated by different circumstances. For instance, one of the writers has a lifelong friend who is, as a general thing, argumentative, intolerant, aggressive, and outspoken, but in the presence of her crippled sister she is a model of charm, politeness, consideration, thoughtfulness, tact, and submissiveness. Both patterns of behavior are real, coexistent, and spontaneously natural. Such contradictions make the path of the classifier hard.

Summary

The last two decades have seen a great development of tests and other measures designed to investigate personality, or at least some of the traits that make up the complex of personality. Almost anything a person does and almost any attitude he expresses shows his personality to a greater or lesser extent. The inventories of traits and attitudes were the first type of measurement to appear. More prominent at present are the various types of projective techniques, among them the Rorschach and the Thematic Apperception Test. The grouping of traits into proposed clusters has not progressed as far as the measurements of personality, but some constellations are proposed by several investigators.

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Emotional Deviates

In order to discuss emotional deviation clearly, it is necessary to understand some of the factors which contribute to any definition of what constitutes either normality or abnormality. Although it is not possible to clarify in a single chapter—or perhaps in a single lifetime—the many stated and imputed assumptions that are being made when the term “abnormal” is used, the essential point can be stated briefly. That is abnormal which does not conform to the standards of the observer, thus, inevitably, what one person considers abnormal, another does not. Both the individual under consideration and his observers exist within an enormously complex cultural pattern, which includes their assumptions, their personalities, their medical and biological histories, and the intellectual and emotional responses that they share as members of a particular society. The adolescent, in a given culture may develop a wide range of behavior patterns and still remain “normal” to an observer of similar background, although he might be considered as odd by an outsider to that particular culture. Within some primitive societies, for instance, behavior patterns that would be sufficiently handicapping to warrant hospitalization in a modern urban context are cause for high status and are of value to the community. However, it is generally acceptable to define a serious deviation in personality as one which, to some degree, handicaps the individual in his relationships within his usual social context, either because of the disturbance that his behavior causes or because of the suffering he undergoes in attempting to obtain normal satisfactions. Those with a psychoanalytic viewpoint may feel that mental health is attained in the degree to which an individual is able to work out in ways acceptable both to society and to himself expressions of the personality factors established by hereditary or early experience. Either explanation of normality will suffice in this presentation, at least.

For the teacher, the main setting is the classroom, and in this little world the normal adolescent is the one who is able to conduct himself in acceptable ways and to find satisfaction for his own drives in doing so. Actually, the teacher has an excellent opportunity for the observation of

emotional disturbance, because she sees the pupils almost every day against a familiar background. If pupils are in her class for a year, there is time enough to note some developmental trends as well. The requirements of the social environment are today so complex and the pressures upon the adolescent so numerous that it is not surprising to find some pupils who cannot meet the demands made upon them. Therefore, the teacher must be quick to note departures from patterns of healthy development.

It is usually conceded that adolescence is a time of peculiar vulnerability to conflict and maladjustment, since this period in human growth combines the maximum sexual and social pressures with the maximum degree of physical instability. The adolescent is, therefore, driven by too many pressures and too many stimuli at a time when his ability to resist is especially low. To be sure, both children and young adults become disturbed and sometimes maladjusted, but they are more able to resist pressures than the adolescent.

Classification of Deviates

In the past a number of more or less elaborate schemes for diagnosis and classification have been in vogue. Of late there has been a movement away from the naming or labeling of mental illness, partly because experts could not agree among themselves as to just what they meant by their labels and partly because the mere act of putting a name to a condition may give a false impression of certainty about it. In any case, it has been felt that the systems were too rigid to reflect properly the great variation of human reactions. The more modern approach is to define emotional disturbances along a continuum of some basic concept—either in terms of the degree of disturbance to the fundamental ego structure or in terms of the problems presented overtly. Since the secondary school teacher is concerned only with observing and reporting behavior, it seems best to present emotional disturbances in terms of symptoms that lead to behavior indicative of possible problems of personality. Therefore, no attempt will be made to present any medical system of classification, although a student who reads material in abnormal psychology will be sure to encounter various systems. There is need for a synthesized classification, to be sure, but those best qualified to judge feel that the time is not yet ripe for it, and that a too early classification would only hamper further research by seeming to give an entity to what is at best a particular constellation of information for immediate practical convenience. That is, a too early solidification of ideas would be more of a handicap than a help.

For the purpose of this book, a nontechnical, simple presentation of maladjustments seemed desirable. The authors have therefore used a simple grouping that is largely in terms of behavior, since that is what the teacher

sees. The first group contains those adolescents who show relatively minor disturbances of behavior, without apparent deep involvement of the personality. The underlying condition may be potentially serious, but the present behavior is not far outside the normal range. The second group is made up of those who have severe behavior problems but do not impress the observer as being emotionally ill. In their case, the personality has been previously damaged, but they have made an adjustment that, while of low social acceptability, is satisfactory to them, consequently, they do not impress the casual observer as being "abnormal," except in some phases of their behavior. In the third group are those who express their maladjustments through physical illness. Here again there is great involvement of the personality, but the form of expression is most effective in concealing the damage. Finally, there is a group of those who have suffered severe changes of personality and are expressing their difficulties either through a withdrawal from a life that they cannot adjust to or through a distortion of the life around them in an effort to make it more bearable. These adolescents are the ones who impress even the most casual observer as "queer." The members of this group most frequently show too little overt behavior, not too much.

In a book of this type, it is not necessary to go into causation, except insofar as some comments may throw light upon observed behavior. One point might, however, be noted. The varied disturbances in personality and the emotional maladjustments of various kinds often stem from precisely the same external deprivations or situations. Thus, the failure to obtain comforting and supporting aid from one's parents, especially in the early years when they constitute the growing child's entire world, causes more or less damage to the developing personality, but the behavioral expressions of the damage may vary greatly. Just which visible form the fundamental, underlying emotional maladjustment may take depends apparently more upon how the individual reacts to the damage done rather than upon the damage itself. Thus, for instance, parental overdomination appears in the history of many adolescents with emotional deviations, one may become an uncontrollable delinquent, another a withdrawn neurotic, a third an invalid, and a fourth a constant dabbler in esoteric religions. What one sees are the forms through which a person expresses his difficulties, and these forms are many. Just which one a given adolescent will use cannot be predicted. In general, one can say that the "causes" are much the same in almost all cases, the differences in expression probably arise from the different personality patterns within each individual.

The descriptions of emotional deviations in the remainder of this chapter are purposely expressed, insofar as possible, in nonmedical terms. The many histories of individuals are written as they might have been written by any observant layman. Neither descriptions nor histories are intended for reading by a specialist, they are for a teacher who has only a

layman's knowledge of medical matters. It is very desirable that the reader should look up a few of the references given at the end of the chapter in order to become aware of the complexity of causation, the extensive study, the infinite variations, and the delicate handling that constitute the medical approach to the matter of mental and emotional abnormality. In the interests of clarity the presentation in this chapter has been oversimplified, it will serve as a basis, but the reader would do well to add to it. In general, the writers have tried to present one case history of an adolescent in school as illustration of each condition, and frequently they have written a second study to illustrate the long-term results of maladjustment if the basic problems are never resolved.

Patterns of Emotional Deviation

The first sections will describe four types of individual: the adolescent with feelings of inferiority, the pupil with anxiety, the boy or girl with moods, and the adolescent with a specific fear or compulsion who seems otherwise normal.

Patterns of Reaction, without Major Changes of Personality. Perhaps the easiest deviation to understand is the feeling of inferiority, since everyone has such a feeling at one time or another. The adolescents in this group merely show an overreaction or else they make this response to a totally inadequate stimulus. In some instances a pupil has a real, objective, observable, understandable reason for his feeling, although many pupils with serious handicaps do not feel inferior. Presumably the development of the feelings depends upon how strong and how secure a personality the pupil had before he discovered his area of inferiority. The conviction that one is personally or socially inferior is very real to many adolescents, and some of them are unable to bear the resulting stress. The background factor that elicits such feelings may be an actual one—severe crippling, marked social handicaps, genuine ugliness, or slowness of comprehension, for instance—but the important aspect is the adolescent's emotional conviction that he is inferior. In many instances there is either no actual basis at all or only what might be called a comparative basis, as when, for example, a girl who is lovely to look at feels herself inferior because she is only the second loveliest girl in the class.

Feelings of inferiority manifest themselves at all ages but are perhaps more common in adolescence than at other times. It is during these years that the boy or girl first begins seriously to evaluate himself. He studies himself in the mirror and gets upset because his face is out of proportion. He examines his clothes and is distressed if they are not up to the standard he observes around him. He evaluates his friends and often makes efforts to get into social groups that he feels to be more successful than his own. He begins to consider his ability and personality. He wants to understand

his place in the world, and he all too often fixes upon a vocational or social ideal that is almost impossible of attainment by a person of his personality and intelligence. For the first time differences in wealth and material possession become important. Social relationships between boys and girls precipitate adolescents into situations in which they feel awkward and incapable. It is not surprising, then, to find feelings of inferiority especially common in early adolescence, because boys and girls are facing many new situations and have not yet had time to evaluate adequately either themselves or the new needs in their lives.

There are two typical but quite different forms of behavior that may be shown by adolescents who are suffering from chronic feelings of inferiority. The first type is simple and obvious because the inner frustration shows on the surface. The pupil is unwilling to attempt any activity in which his real or imagined inability might become evident. He therefore withdraws from competitive activities, even from those in which he could succeed. He is generally diffident, self-conscious, and unsure of himself. He complains of anxiety, fear of failure, inability to get his work done—perhaps of such physical conditions as insomnia, excessive sweating, and palpitations. If the situation continues long enough, the galling sense of inferiority spreads to other fields and the character of the boy or girl becomes permeated with a sense of futility.

Some pupils, however, are not content to stay in the background and admit their insufficiencies. Instead, they make every effort to cover them up so that others will not suspect the existence of an inferiority. Usually an individual with this type of reaction tries so hard to conceal his handicap that he overdoes the matter, his resulting "overcompensation" displays his true feelings quite as blatantly as a withdrawal, but less obviously to the uninitiated. Thus the pupil who is afraid of physical combat and ashamed of his fear boasts loudly of his prowess, secretly hoping no one will call his bluff. The pupil who knows he is stupid persists in volunteering several times a day. The pupil who has no social graces makes repeated attempts to be the life of the party. The student who has had an uneventful life invents thrilling experiences. All such behavior, directed toward the covering up of inferiority, even from the pupil himself, is of a compensatory nature. The teacher should learn to see through the ordinary forms of overcompensation and to recognize them for what they are—the drives of an ego that is frustrated but will not be suppressed.

There are two case histories in this section. The first is of a boy who had an actual, but seemingly not important, inferiority, upon which he had piled a considerable degree of maladjustment. This lad made no effort to deceive himself as to his rather peculiar shortcoming. The second story is of another boy who could not face himself as he was and therefore used all manner of overcompensatory reactions to defend his ego.

Beryl A., already an accomplished commercial artist at sixteen, was earning a prosperous living by doing illustrations for the local utility company while he was still in high school. Bright, economically secure, talented, he seemed to be set for a sunny future. This was not the way it worked out. Beryl's talented hands were, by a trick of congenital misfortune, so small that their fantastic appearance at the end of his long bony adolescent arms were often the occasion for uproarious laughter from his peers, and even adults could only partly conceal the startling effect of those tiny, pink-palmed hands. Beryl was very light although he was of half-Negro ancestry, and the color of his tiny hands was the last straw, in his mind. In the social context of his parents' friends and their families, he was wholly accepted socially, and even at school he was admired for his accomplishments. However, he derived little comfort from his success or from the sympathetic understanding of his parents. To everyone's distress, he spent more and more time over the drawing board, until his every moment away from school was occupied with paint, never with people. Finally, urged by his parents to seek counseling, Beryl checked into the office of the college's counselor in mental health on the very day that he registered at a distant university for an art course. At first, his best intentions to overcome his inability to take his hands out of his pockets unless they were to hold a pen or a brush were of no avail. He could discuss his problem with the counselor, but he could not face his peers with comfort. Then one day he went to the infirmary with a nasty infection on his thumb, and was dumbfounded when the nurse not only gave no sign that anything was remarkable about his hands but said, "Oh—I hadn't noticed" when he bluntly asked her about how she felt concerning his hands. No miracles of quick recovery occurred, but it was vividly impressed on him by experience that his physical inferiority was really not so remarkable or so hideous. Gradually, in the company of peers with more maturity and control than those he encountered in high school, and with the growing sense of his own complex individuality, he began to accept and be accepted in social situations. He will always have a problem, but it is assuming proportions he will find manageable and compatible with a normal adjustment to life.

Tony was an Italian lad of seventeen who would have been handsome if it were not for his petulant expression. When someone began to talk with him his face underwent a change and a flashing smile appeared, but the radiance vanished the moment the other person's attention moved away from Tony to someone else. In a "Guess Who" test given by his English teacher Tony was selected as the "show-off" by 19 classmates, as the "tough guy" by 11, as the "screwball" by 9, and as the "lonely guy" by 2 pupils with unusual perspicacity for their age. Tony's teacher characterized him as being insolent, hyperactive, vain, peculiar, and unpredictable. He frequently caused minor disturbances in class, chiefly because he could not bear to be out of the limelight and would draw down punishment upon himself by making a scene rather than remain ignored. His insolence often took the form of "wisecracks" at which the class would laugh.

Upon examination this boy turned out to have an IQ of only 94, a level that is a little low for success in high school unless a pupil is willing to compensate for his mental inadequacy by extra effort. Tony was doing either failing or barely passing work in every class. His worst subject was algebra, and he had a record

of difficulty with arithmetic in elementary school, although he was unusually clever in trading and swapping actual objects with other boys. Tony believed that his teachers discriminated against him and gave his work poorer grades than it should receive. He showed the examiner one of his notebooks which was quite neat and legibly written, but upon closer examination it appeared that Tony had merely copied what his teachers had put upon the blackboard without any evidence of comprehension and without organization. He had no notes on reading because, as he freely admitted, he never read his assignments on the ground that "the stuff is all too silly to waste time on." On a reading test he scored at the sixth-grade level. It is probable that his abstinence from reading had resulted from his failure to comprehend what he read and from his dislike of any occupation that offered no chance for showing off. On the playground Tony's behavior was objectionable in two ways: he liked to break into a game that was proceeding nicely—especially if the boys were younger and smaller than he—by grabbing the ball and refusing to give it back, and he liked to sit on the side lines making loud and generally abusive comments upon the progress of the game and the activities of the players. He was fairly adept at a number of games but no one wanted him on his team because Tony monopolized the game, even when his team was losing, on account of his efforts to play all positions himself. His natural talents in athletics were good enough, had he been willing to put in hours of practice, to have won him prominence on school teams, but he would not submit to the grind of practice work and therefore missed the opportunity to shine as an athlete.

Tony lived with his mother and stepfather. His two older sisters were already married. Two brothers who had been born between the girls and Tony had both died in infancy. He was therefore the only boy in the family, and there was a gap of nearly ten years between his sisters and himself. During his childhood he received much attention from his mother and even more from his sisters, who greatly enjoyed having a live doll to play with. Tony's father had been an Italian immigrant. During his lifetime the family lived in a poor section of the city among other Italian immigrants, but after Tony's mother's remarriage they moved to a better part of town, where they still do not feel entirely comfortable. The mother's second marriage was a severe shock to Tony, and he was clearly jealous of his stepfather. Gradually, however, he accepted the situation with fairly good grace, probably because his stepfather, who is a traveling salesman, was away from home during the week and sometimes for longer periods. Tony was thus able to retain his position as the chief attraction in the family most of the time. Tony's mother has overprotected him. She has the same rather empty good looks as her son, and one suspects that she has the same rather empty mind. She has many explanations for her son's failure to be popular. Mostly she bases her excuses upon the supposed envy of other boys because Tony is so handsome and because they supposedly feel that he will supplant them if he has half a chance. His stepfather is aware that the mother is too indulgent with Tony, but he does not feel he can interfere because of his own rather precarious position as an outsider who has recently joined the family.

It seems probable that Tony is overcompensating for both an intellectual and a social inferiority. In his franker moments he admits that he is not a success, either in school or out. At home he has always been the center of admiration and

affection, and he does not know how to get along in any other kind of relationship. If he is disregarded for a few hours his basic feelings of inferiority overtake him and so threaten his ego that he is stimulated into any kind of action that will center attention upon him again. It is possible that if Tony drops out of school, where the competition is too severe for him, and goes into some kind of work within his capacities he could learn to relax. When Tony is older and if he could qualify for it, he would make an excellent maitre d'hôtel, a position in which his natural charm and good looks would be an advantage, in which he would feel himself important. In the meantime he might find satisfaction in any occupation for which he can wear a uniform and have people looking at him. With careful handling he may yet be a success, but without it he is likely to become more and more of a problem because he cannot let down his defenses without more damage to his ego.

Anxiety. Although anxiety exists to some extent in every individual, and particularly during adolescence when many situations arise in which the outcome cannot be reliably predicted because of the adolescent's inexperience, it can be a serious emotional handicap if it either pervades the over-all attitudes or if it appears episodically with such intensity that the individual is incapacitated for daily living. It may range from a slight, vague apprehensiveness about even minor problems to an all-pervading fear that is so intense as to affect concentration and memory and to lead to exhaustion.

The anxiety itself may best be thought of as an escape mechanism which, while unpleasant, is by no means as devastating to the ego as facing the underlying conflict would be. It is, of course, not a good form of escape because it promptly produces so much maladjustment that the sufferer has to use further forms in order to escape from the escape! The person with a chronic anxiety originally develops the condition in response to some situation that threatened his security, but either the threat never materialized or it is a continuing threat that never disappears.

The commonest anxieties are of the simple types described below, in which the pressure, the anxiety, and the compulsive reactions to it stand out clearly.

Mildred M. is a high school girl with an anxiety that centers around the marks she receives on assignments, reports, and examinations. She bores her age-mates by her constant chatter about marks—what per cent she received, her general up-or-down trend in each course, her apprehensions about examinations, and so on. Twice, when she knew that a teacher was correcting papers, she has sneaked into the teacher's homeroom at recess and has been discovered as she searched through the papers to see if hers had been scored. She has also been caught changing the marks on her papers before she took them home. She has saved every returned paper since her entry into high school (except a few that she threw away during the first month, an action she now regrets), and every Sunday afternoon she spends two or three hours leafing through them and pondering her progress or lack of it.

She is often greatly upset by the weekly review. As the day of an examination approaches, she becomes more and more apprehensive. After it is over, she gives her family and friends a play-by-play account of what she wrote and why. Unlike pupils who become hysterical about examinations and are unable to take them because their heads ache violently or because they are suffering from nausea, Mildred remains apprehensive without discharging her emotional load by means of any projective technique. What little relief she gets comes through the normal channel of answering questions correctly or from preparing assignments well. Unfortunately, however, Mildred's successes do not occur often enough to discharge more than a fraction of the pressure.

The reasons for this girl's condition are not far to seek. She is the one person of average ability in a family of superior verbal intelligence. Both parents and two older siblings made Phi Beta Kappa, and an older sister, now in college, almost certainly will do so. The parents became acquainted with each other when they were members of a high school honor society. After they graduated from college, the father went into business, and the mother concentrated on raising a family. Neither has had contact with professional people—who might have influenced them to evaluate marks more temperately—and both have sought refuge from their present boredom by reliving their own academic success in their children. Ever since she can remember, Mildred has heard high marks praised and admired as the *ne plus ultra* of life. Thus Mildred continues to be afraid of examinations, anxious about assignments, fearful of an unsuccessful college career, and apprehensive of eventual failure in a life that is rigidly evaluated in tenths of a per cent!

Moodiness In a recent study of two thousand pupils in grades 7 through 12, one girl expressed feelings common to many adolescents:

One of the difficulties of teen-agers is these moods. Sometimes they get up in the morning feeling wonderful. Instead of talking they feel like singing. Other days they feel wretched and depressed. They can hardly drag themselves around. These moods come and go in a mysterious way, for just no reason at all.¹

This statement reveals both the moodiness and the baffled feeling about it, a feeling that often causes more disturbance than the mood itself.

An acceptance of these normal swings of mood among adolescents by their parents and teachers serves to help young people through this period by de-emphasizing the importance of incidental and short-range changes. The skillful teacher can even make constructive use of these fluctuating patterns by providing creative or sedative activities, so that the adolescent can learn to make constructive use of his upswings and to check his downswings. He may remain a moody individual, but he is no longer at the mercy of whatever feeling happens to seize him, and he is less likely to be overwhelmed by extreme fluctuations than is a person who has never had such training. If there is no serious, pervasive, continuing problem underlying these elations and depressions, most boys and girls will reach an indi-

¹ R. Strang, "Adolescent Views on One Aspect of Their Development," *Journal of Educational Psychology*, 46 42, 1957.

vidual equilibrium without going off the deep end at either extreme of their own emotional range

Some individuals, however, show an abnormal range of mood and often a sudden change from one extreme to the other. When they are excited they talk continually and loudly to anyone who will listen, they are in almost constant motion, and they flare up into worse disorder at the least restraint. They are overactive, noisy, and inclined to exhibitionistic clowning. They seem highly elated, vivacious, optimistic, socially confident, and extremely friendly. They unconcernedly engage perfect strangers in the most intimate conversations. The speech has also a highly characteristic loose-jointedness, with one statement leading to another, not by logical connection but by chance association of sounds or other superficial connections. There is often a good deal of rhyming and punning. If the reader will recall the most scatterbrained, fastest-talking, gossipy woman he ever knew and will concentrate upon the pressure behind her speech, her inability to keep on the point, her lack of coherence, and the difficulty of stopping her long enough to escape from the torrent of words, he will get some notion of the typical speech of a person driven by euphoria. Such people are, however, sometimes equally possessed by a diametrically opposite mood. Their behavior is slow, inhibited, restrained, quiet, reserved, and subdued. They seem dejected, melancholy, pessimistic, hopeless, tired to exhaustion, brooding, anxious. They remain alone, if allowed to do so. If they talk at all, they complain of sundry aches and pains, of certainty that they have an incurable disease, of guilt for some heinous crime (often the "unforgivable sin," the exact identity of which has never been discovered). Their speech is slow, and their thinking seems to be not only retarded but difficult. Any given person is likely to vary more frequently in one direction than in the other, and some people vary from their normal well-being in only one direction, most, however, go up and down at different times.

High school teachers soon become familiar with the normal moodiness of adolescence. It differs from abnormality in three quite recognizable ways. First, it has a discernible and sensible cause, although at times the reason seems inadequate. Thus a boy may become deeply despondent because he did not make the second track team or a girl may be all agog because she received a good mark on her weekly theme. In contrast, the moods of abnormal persons do not always seem related to environmental stimuli. Second, the moodiness is too extreme and too intense to be mistaken for an ordinary variation of attitude. Third, the abnormally moody adolescent is driven by his moods. He does not possess them, they possess him. A teacher should be able to recognize the difference between the ordinary ups and downs of adolescent emotion and the extreme driving moodiness that is not normal. The study below describes a typical state of abnormally intense depression, with a typical trigger of physical illness, which predisposed the

patient to low resistance toward long-latent conflicts. Psychiatrists point out that an illness need not be severe to act as a trigger, it need only occur at a vulnerable point in the patient's life.

Long John was a tall, stringbean of a lad in the junior year of high school. He was still awkward and apparently not yet accustomed to being his adult height. Even before he began his adolescent growth, however, he had acquired a reputation as a buffoon, and he had continued in this vein, presumably because it gave him an easy escape from the predicaments into which his new size often precipitated him. To his teachers he was a half-curse and a half-blessing, since his ebullient spirits could save awkward moments from becoming more awkward but could bring on fits of hysterics in other pupils at inopportune times. Long John's grandfather, father, two uncles, and one brother were all doctors, and the family owned and were the resident staff of the local hospital. It had always been assumed that the boy would join in the family profession and in his turn become the "young doctor" of the group. Long John never told anyone that the constant discussions of illness and symptoms at the dinner table turned his stomach or that he would much rather draw cartoons than study medicine. His drawings were original and clever, although the humor in them needed control and refinement, but the talent was there. When the school nurse, a little concerned about the boy's extreme thinness, asked him to tell her just what he had had to eat the day before, he replied, "We had diseased kidneys for breakfast, a stomach cancer for lunch, and a particularly gory tonsillectomy for dinner. It's what we always have in our house." To Long John humor was a refuge, it served to hide, perhaps from himself, his fear of his own failure as a doctor.

The boy indubitably had moods, as all his teachers had noted, but the first time the seriousness of his variations was appreciated was during a "stunt show" that the junior class staged for the rest of the school. Everyone was excited and merry, and there was great applause when Long John appeared on the stage and began some of his customary clowning. He kept on and on. After a while, although the other pupils still laughed, members of the faculty began to be worried. In the end, the school doctor—with considerable presence of mind—joined the act and managed to get the boy off the stage. The doctor at once drove Long John home and delivered him, still talking nonsense at the top of his voice, to the bevy of local medical talent that constituted John's family. The boy talked for several hours longer before drugs finally put him to sleep. The next day John lay in bed, silent and motionless, but on the following day he was back at school and in his customary frame of mind. The school doctor presently made an occasion to talk with John, but he was unable to get past the façade of fluent speech and humorous comment.

The next semester John began a course in zoology, as a first step toward his proposed medical career. From the first, he had great trouble with the laboratory work. Somehow, he never succeeded in dissecting anything, not even an angleworm. His first month's report showed a failing mark in his laboratory work. His father was greatly disturbed and scolded John for frittering away his time in drawings and social life instead of getting his schoolwork done. John's teachers noticed that his moods were even more pronounced and unpredictable than ever. When he was not the life of the party he was glum and silent. All his schoolwork

deteriorated, and he began to stay away from the zoology laboratory altogether. One night he did not come home for dinner and was picked up about 2 A.M. by the police and returned to his family; he seemed confused and very tired, and could give no coherent explanation of where he had been or why he had not come home as usual.

The following morning John had a high temperature and was clearly suffering from influenza. With the usual vitality of adolescence, he soon recovered and was back at school in about ten days. He was in one of his excited moods and was quite objectionable in class because he wanted to talk all the time. One of his teachers made an appointment for him to see the school doctor after the last class, but John did not keep the appointment. Nor was he home at dinnertime. The family was about half through dinner when a low humming sound suddenly attracted the attention of John's mother, who could not identify it. She said it sounded like a vacuum cleaner, but none was being used at the time. The men looked at each other and ran for the garage. There they found John, nearly dead from carbon monoxide. Since he had attached a piece of hose to the exhaust and led the other end into the car, there was no question as to his intent. His father and uncles worked over him all night and finally saved his life. In the following days of weakness John finally admitted his problem—that everything connected with medicine made him acutely ill and he could never fulfill the plans of his family. The experience had taught John's father something. He discovered that he had pushed his much-loved son almost into a suicide's grave. From then on, there was no more talk of John's being a doctor. Moreover, his father made arrangements for John to talk over his difficulties of temperament with a psychiatrist. There is now every hope that Long John will some day be a successful and happy commercial artist, whose moods will stay within normal limits.

This history shows outstanding features of depression with suicidal attempts, hostility toward the father, great sense of guilt and inadequacy, and a disguised fear of punishment. Some authorities feel that the overwhelming of the ego by pubertal sexual drives is the most frequent cause of depressive suicides in adolescents, but often the salient, observable feature is the rejection—actual or perceived as such—of the boy or girl by the father-figure. In the above instance the father seems to have wanted his son to be a continuation of himself rather than an independent individual, and the boy's efforts to fulfill this wish led him into constant conflict with his own interests, his own abilities, and his own needs—but his feelings of guilt kept him trying until his problems became more than he could bear.

A less dramatic but more enduring deviation in emotional swings is shown in the story below, which illustrates the transition of untreated problems into the stage of serious, permanent disturbance.

Margaret R. was born into poverty. In the course of her thirty years she has risen to considerable wealth but certainly not by the smooth rags-to-riches route of the usual legend. Her very rough road to what the world regards as a successful career began in a San Francisco boarding house, where her burlesque-queen mother

was temporarily and very unwillingly residing with a longshoreman husband. For about three years her mother was fascinated by the pretty baby she had borne from a very casual marriage of necessity. However, she was at that time only an immature twenty herself, and one dull day she left baby with a farewell note pinned to its clothes and set off in the general direction of Hawaii, leaving the father to cope with the situation as best he could. The father's best was to board his daughter with an aunt who had a small son of her own to whom she was devoted. Margaret felt, however, that the treatment she received, while decent enough, was inferior to that received by her cousin, and sometimes she would become unhappy and quiet for days at a time, if a visitor took polite notice of her, she was likely to burst into a somewhat embarrassing paean of joy. She early developed a talent for dancing. By the time of her rather early adolescence, she was a full-blown, graceful, ultra-moody girl of great beauty. Her obvious accomplishments would have made her popular except for the fact that she became apprehensive and depressed before each dancing recital and could hardly summon up enough courage to speak to a friend, or attend school, or even to eat.

Her foster mother, over the objections of her father, decided to place her in a school for professional young artists, where she got an uneven education and a great many dancing jobs. She became an outstanding artiste in her field by the time she was sixteen, but at a terrible cost in emotional stress. When she was offered a European scholarship, she developed a state of profound conflict. On the one hand, she knew she should accept the scholarship if she wanted to go on with her career, but on the other its acceptance meant leaving what slender home ties she had and, moreover, facing the possibility of failure. She spent three days just sitting and thinking in a darkened room and then left for England to join a famous dance group.

In England she met many who admired her and one who she hoped loved her. There was an intense affair that carried her to the heights of joy, but the young man in question did not feel inclined to marry the daughter of a longshoreman and a burlesque queen, so it became an ex affair. Margaret's grief was deep. She could not follow simple directions at rehearsals, she could not remember the dance steps, she could hardly make contact with people at all. She returned home and presently, at the advice of her ballet master, voluntarily entered a local sanitarium.

Up to this point many of Margaret's emotional swings had been in response to admittedly difficult situations, but her reaction was excessive and her ego had already become so insecure through her childhood experiences and through her constant, obsessive fear of dancing in public that she could not absorb a new blow. After four months in the sanitarium, during which the routine and the therapy soothed her and permitted something of a return to normal, she emerged to dance again and to contract a brief marriage with a wealthy but immature and philandering admirer. His neglect plunged her back into another depression and eventually, when her husband got tired of her demands for affection and left her, back into the hospital.

The next time Margaret emerged she came out in high spirits, with a determination to be a theatrical agent instead of a performer. This arrangement eliminated one situation to which she made an overemotionalized response. Since

she had charm, knowledge, and the right contacts she was soon the head of a thriving booking agency. Her office staff have learned to keep the business on a fairly even keel by leaving the boss alone when she is depressed and protecting her from seeing clients when she is exhilarated. The business therefore prospers, but Margaret does not. Thus far no man has been able to respond to her really terrifying need for love, although several affairs have occurred. Her business judgment is now not as good as it once was. She cannot trust herself. Her moods last longer. In her excited moods she makes unwise decisions, in her depressions she refuses to make any at all. One day beautiful, successful Margaret will again flee to the sanitarium and never leave it.

This woman has really spent her life trying to find the normal satisfactions that were denied her in her childhood. Her troubles were magnified because she has lived in an environment that is by nature disorganizing. There is nothing in it that could help to hold her own easy disorganization of mood together. And her intense need for affection and security frightened off those who might best have given her what she most required. Early treatment might have prevented her long, miserable tobogganing into pervasive personality damage.

Obsessions and Phobias To the casual observer, a phobia does not look much like an obsession, but they have their origin in the same motivation and they share an inner compulsion that is generally not understood by the sufferer himself. Two possible explanations will be given, one is psychoanalytic in point of view and one is not.²

The former presupposes that both difficulties begin with the pressure exerted by strong instinctual drives that the ego cannot accept. The first reaction, accompanied by a good deal of anxiety, is a direct repression of the drives. The pressure, however, continues with the generation of further anxiety lest the drives break through. The resulting tension is highly uncomfortable. An ego that is too weak to reconcile the drives with the restrictions of conscience may make either of two reactions in attempting to reject that part of its total make-up that is unacceptable to the rest. It can project the feeling of anxiety onto a particular object, person, or situation, or it can concentrate upon erecting a defense through which the offending drives cannot pass. In the first case, the individual develops a phobia. Instead of fearing himself, he fears cats, or thunderstorms, or sharp knives. Part of himself has thus been rejected and part retained. His projection helps him in two ways: he has apparently rid himself of the blame for having started the whole thing, and he has freed himself of tension during the absences of the feared object. If, however, his ego has enough strength to put up a fight, he tries to prevent the fear from ever arising,

² See G. H. J. Pearson, *Emotional Disorders of Children: A Casebook of Child Psychiatry*, W. W. Norton & Company, 1949, Chap. 9, B. Crider, "Phobias: Their Nature and Treatment," *Journal of Psychology*, 27 217-229, 1949, and N. Cameron, *The Psychology of Behavior Disorders*, Houghton Mifflin Company, 1947, Chap. 10.

instead of projecting it after it has arisen. To this end he tries various rituals in the belief that if he goes through a certain set of avoidance reactions the drive will not break through. When the defensive reaction first appears the individual usually fights against it, but his conscious opposition is to no avail, because the reaction *does* bring relief from the underlying fear by preventing it from arising. The only safety for the ego now lies in following out the ritual exactly, and the individual soon feels compulsion to repeat a given act or to carry out a series of acts in a given order. That is, he has an obsession.

Another and less psychoanalytic explanation of phobias and obsessions should perhaps be presented. This theory presupposes the existence of a severe, long since forgotten, traumatic, emotional episode, to which the reactions of fear and anxiety were quite natural but were accompanied by equally strong feelings of guilt or shame and were therefore repressed. At some subsequent date an object, situation, or person reminiscent of the original experience appears and precipitates a reaction that was once sensible but now seems ridiculous. The sufferer from this condition cannot give an explanation because he has forgotten the missing links in his story, either through passage of time or through repression. A similar type of explanation may be offered for obsessions. Presumably, while the traumatic experience was only partly repressed, it kept popping back into consciousness. Since sheer repression was not burying the objectionable memory fast enough, the individual tried prevention. At the first hint of returning recollection he diverted his attention by such distractions as walking three steps backward and blinking the eyes twice with each step. As a result of his distracted attention, the painful memory never became fully conscious. It should be noted that in all probability the defensive behavior really did work the first few times it was tried. The now-unconscious memories keep on trying to thrust themselves up and succeed sufficiently to make the individual feel tense and apprehensive. When the pressure gets high enough he performs his ritual and gets relief for a while, although he has long since forgotten what he is defending himself from. He has lost the connecting link between stimulus and response, but he has not forgotten that his mannerism, whatever its nature, has in the past brought him relief. There is no sense in trying to "educate" such a person out of his obsession, because he will succeed only in adding to his other troubles a new feeling of guilt and distress at his lack of self-control.

Although a person may develop a phobia about anything, certain types of stimuli are more common than others: fear of small, closed spaces—claustrophobia, fear of open spaces, fear of looking down from a high place, fear of being alone, of falling down; and fear of death, knives, tunnels, storms, wind, or lightning. Generally, the stimuli are such as might normally cause a feeling of disquiet. Most people do not like to be shut in a closet

or to look down from the top of a tower, but such experiences are only unpleasant, not terrifying. Similarly, most persons have more or less fear of the water, but they can inhibit it long enough to learn how to swim, a person with a phobia about water cannot be persuaded even to take a bath. The abnormal thing about most phobias is, therefore, their terrifying intensity rather than their nature.

The warping of normal human relationships by a central fear is shown in the case study below.

Edna S. was a sophomore in college. She was twenty years old and had an IQ of 122. Her chief complaint was that she had a pronounced fear of being alone with any man, it made no difference if the man were a professor, a student, a relative, a casual acquaintance, young or old. She never accepted invitations that would involve her being alone with a male acquaintance. This settled policy on her part resulted in her absence from practically all social affairs. During high school she had never attended a dance or evening party of any kind, even at the school, unless she was sure she could go and come with a group of girls. Edna could give no explanation for her phobia of men and believed that nothing could be done to help her. On the rare occasions when circumstances left her and a man together, she began at once to tremble, to perspire, and to become faint.

Edna had been the only child during her early years. She was a great favorite of her father, who adored her. He died when she was only five years old. In spite of her extreme youth, she cried and asked continually for her father for over a week after his death. Two years later her mother remarried. The mother was a highly emotional woman with little control over herself. She had infantile temper tantrums and hysterical attacks, which contributed to the emotional tension of the home. Edna never liked her stepfather, and he did not care much for her. Moreover, he attempted to provide the home discipline she probably needed, with the result that she came to hate him.

At school Edna always did good work and got along well with her age mates, as long as she was in the elementary grades. In high school she made the school honor society, partly because of her good native ability, partly because she used for study the extra time she saved from parties, and partly because she had displaced her emotional drives from heterosexual interests to academic pursuits.

Investigation disclosed that when Edna was about eight years old—shortly after her mother's remarriage, while she was still in an upset condition from efforts to adjust to a new regime—she suffered a severe emotional shock. One evening she was left at home in the care of a male boarder, who attempted to molest her. Although he did not actually rape her, he frightened her badly, and then terrified her with threats of bodily harm if she should ever report his actions to her parents. Since he remained thereafter for some time within the family circle, Edna was constantly reminded of her experience, which she repressed completely for many years and until recently could not speak of without signs of emotional strain.

Treatment of this girl consisted primarily in leading her to talk freely of the repressed episode. When she first revealed it, she wept copiously. Seeing that this experience was a focal point in her difficulties of adjustment, the therapist encouraged her to relate the story over and over until it had lost its emotional content.

Gradually she became objective about the whole episode and no longer showed fear, guilt, or shame. She read a little about the genesis of phobias in general and applied what she had read, under the therapist's supervision, to her own case. She began to show improvement almost at once. Within about four months she had her first date with a young man, with whom she walked to and from a theater without feeling anything more than a mild pleasure in his company. From this time on she improved rapidly and was able to make an almost normal adjustment. For the present at least she has lost her phobia, although no one can say that it will not return, if she marries—especially if she marries a man who is thoughtless and callous in his advances to her.³

A person who is obsessed feels an inner compulsion so strong that he cannot resist it. He may, for instance, feel that he must use his left foot whenever he steps over a crack in the pavement, if by mistake he steps over one with his right foot, he feels compelled to go back and do it over again with his left. A failure to remedy his error makes him uncomfortable and may give him a sense of oncoming disaster. Some high school pupils have distinct obsessional tendencies. Thus one boy may want always to sit in the same seat, another to use the same space at the blackboard day after day, a third to settle down to study by performing a routine series of preparatory acts. Interference with these habits causes distress and sometimes guilt. The history given below describes the nature of compulsions and to some extent suggests the basis for the reactions.

Bryon is a young man of twenty-two, a sophomore in college. In his childhood he carefully avoided stepping on cracks in the pavement, he also felt compelled to pick up every smooth stone he saw. A little later he began to do everything by threes: he counted by threes, tore paper into three pieces, touched each shoe three times after putting it on, arranged objects in groups of three, and so on. Later, he changed to sevens, and felt compelled always to count exactly to seven whenever he urinated. At present he has changed to doing everything by fours. The fundamental compulsion has, of course, not altered. He also feels that he must pick up bits of paper, peelings, scraps, nails, pins, and all manner of small objects.

Bryon's home has been reasonably pleasant, although his mother is a highly emotional woman who broods, worries, takes things too seriously, and is rather uneven in her discipline. The father is a quiet, retiring sort of person, a professional man, whose chief interests are in his home and children. He is much more permissive than the mother. There are two brothers, one older and one younger, with whom Bryon has the usual number of brotherly arguments, but the relationship does not seem abnormal.

Bryon was always fearful, timid, sensitive, and physically weak. He often had terrifying nightmares. He thought other boys at school and in the neighborhood picked on him. By the time he was ten years old he had become quite fat, and he consequently became the butt of childish ridicule, which hurt his feelings. He was too clumsy to fight with other boys, and this inability gave him a sense of helplessness.

³ Based upon L. P. Thorpe, *The Psychology of Abnormal Behavior*, The Ronald Press Company, 1948, p. 373.

ness Like many fat boys he had unusually small genitals and some deposit of fat under the nipples, which gave him a feminine appearance that caused comment In recent summers he has refrained from going swimming, a sport that he enjoys, because he is sensitive about his appearance At present he is not seriously overweight, but the attitudes he built up while he was fat have continued to influence him During his adolescence he learned to masturbate and for a while indulged often in the habit, but has abandoned it of late He has had some dates with girls, but denies that he has ever attempted any intimacies with them

In school Bryon has always done good work He graduated from high school at seventeen in the upper third of his class and entered the university, where he has made normal progress After spending two years in the Army he has returned to school to major in agriculture

Since early childhood this boy has experienced feelings of insecurity and inadequacy, although it is not altogether clear why he should have done so in the years before his obesity began to interfere with normal boyish pursuits His compulsive and phobic patterns were apparently developed as protective mechanisms in order to preserve his ego from further assaults He has always had a strong sense of magic in the carrying out of his rituals and has evidently believed that if he picked up every smooth stone all would go smoothly with him, or if he counted everything in whatever number grouping appealed to him at the moment he would ward off danger Whenever he failed to take the precaution he thought essential—that is, if he inadvertently stepped on a crack in the pavement—he had a strong feeling of guilt and a conviction that something dreadful would soon happen Like the primitive witch doctor, he developed so many taboos that he was almost certain to violate one or more of them every day, and he thus kept himself in an upset state of mind In school he was always very careful to see that his pencils were sharpened to a perfectly symmetrical point Even in eating an apple he was very careful to eat around the apple so as always to leave a circular shape This preciseness has continued in the form of an intense desire to have everything with which he works arranged in the most acceptable manner, pictures always precisely straight on the wall, pencils adjusted to a minute degree, and, above all, his automobile always in as nearly perfect condition as possible Those who know him call him “an old maid” . . .

Another obsession is his desire to glance at the toe of first one shoe and then the other as he walks along, often at the cost of considerable discomfort The more dangerous the terrain, the more likely is he to become obsessed with the desire Frequently he stops, looks at the toe, and then walks on He is also constantly running his hand over the buttons of his clothes to see that they are properly buttoned This he has tried to overcome, but with little success⁴

In this record there is a strong suggestion of sexual involvement, something that has always been too frightening and too painful to be allowed to come into consciousness And there is undoubtedly symbolism in the type of things that he feels compelled to pick up or touch

Both the phobia and the obsession are survivals of an actual adjustment to an actual emotional trauma, and they persist because the emer-

⁴ Adapted from Thorpe, *op cit.*, pp 373-374.

gency still exists. The original shock has never been discharged, only hidden, and it is still trying to force its way into consciousness. Against this intrusion the obsessions and phobias stand guard, either to prevent the emergence or to convert the inner panic into fear of some external object. The usual method of treatment has been, therefore, to try to discover of what the trauma consisted, to drag the hidden episode out into the light of day, to solve the conflict, and to discharge the fear once and for all. In Bryon's case there was some involvement of personality, but often there is much less. The individual remains for years a normal person who—in the vernacular—has a “thing” about elevators or cats or something else.

Disorders of Conduct, with Compensatory Personality Adjustment

The conduct disorders are sometimes easy to recognize, the fact that their source is often obscure and their treatment extremely difficult is of no immediate concern to the teacher. She can hardly help noticing when an “acting out,” aggressive pupil enters her group and proceeds to make chaos and disorder out of her peaceful room. The aggressive, explosive pupil cannot be either overlooked or ignored, but a teacher can make his condition either better or worse by her treatment of him. It is a little more difficult to recognize the so-called psychopathic personality, which may be more destructive to the individual in the long run than mere explosiveness. The youngster whose destructiveness takes the form of overt delinquency is discussed elsewhere in this text and will therefore not be described here. The present section will be confined, then, to two types: the aggressive personality and the psychopathic personality. Both types are hard for a teacher to deal with, especially in a group.

The young people who may be so classified are not out of touch with reality, so they cannot be regarded as psychotic, that is, they are not—in the parlance of the street—crazy. Their perceptions and interpretations of the people and events around them are distorted by their own needs and experiences to a degree that makes them deviate from normal behavior. There has been much work on the aggressive child,⁵ from which a teacher could derive some hints as to treatment, but the psychopath is still a problem to everyone.

Whatever the reasons are that lead to overtly hostile reactions to adults, there seems no question that these boys and girls who lump all grown-ups as enemies have suffered severe emotional deprivations from an early age. A child or adolescent who has a reasonably normal personality can manage to control his behavior even under adverse circumstances, provided he is given some ego support, but the hostile or psychopathic child cannot do so, partly because he cannot use such ego support as he might receive. These

⁵ F. Redl and D. Wineman, *Children Who Hate*, The Free Press of Glencoe, Illinois, 1951, 253 pp., and B. Bettelheim, *Love Is Not Enough*, The Free Press of Glencoe, Illinois, 1951, 386 pp.

children not only do not ask for help, they do not even want help, and will not accept it except to exploit it. Nothing dents their convictions that adults are to be hated.⁶ A teacher cannot, therefore, hope to assist such a pupil by giving him encouragement and support, and she has to be watchful of exploitation, that is, a special consideration or permission that would rejoice the heart of most pupils is likely to be used by the hostile child for his own purposes. There is often no "good" answer to the problems of these pupils.

Edward R., at twelve, had somehow survived the first six grades of school—or perhaps it would be fairer to say that the school had survived six years of him!—because he had flashes of such good intelligence that his despairing teachers were inclined to give him one more chance. Moreover, the principal of the school had come from the same background which had produced Ed and was not only sure that the boy would eventually emerge from it—as he had—but was able to interpret to his teachers the effects of the despair and rejection that Ed was enduring. The boy seemed to be dimly aware of his own capabilities, but was nevertheless unable to use them consistently, even when it would be to his advantage to do so, because the most minute frustration plunged him into an inkwell-throwing fury. He would then marshal a hundred reasons why, with the world of adults conspiring against him, he could never complete the assigned task. He wanted desperately to escape from his squalid home, his screeching sisters, his cringing, unemployed father, and his hate-ridden mother, who used him primarily to vent her wrath upon. He did not have in his home an example of a man's dignity or of a mother's love, but rather than seek them elsewhere, he simply denied their existence. Time after time the school counselor tried to talk with Ed about his problems, but the boy met every advance with coldness and contempt. He might have continued his precarious course barely within the tolerance of school had not his transfer to junior high school precipitated a series of events that eventually landed him in the state hospital for the mentally ill, because there was absolutely no other place that could contain his wrath. The first precipitating factor was the death of his father just as Ed was entering his own period of puberty with its customary problems and strains. The father's death led to the family's moving to a suburban community, to which Ed's mother wanted to return after fifteen years of resentful absence. Here she expected to resume her former respectability and social life, but she soon found that she and her children were unacceptable. Against Ed the community was especially incensed, he was a disgrace and an outrage, and they were critical of him, which he interpreted as hate—a feeling that he returned with interest. Confronted with a set of socially alien standards and sensing the frustration of his angry mother, Ed's thin and inadequate impulse control gave way completely. The young teacher who got whipped across the face with a ruler when she remonstrated with Ed about drawing red lines across his reading book was in no mood for enlightened tolerance and the new principal was a gently reared man who knew violence only by hearsay, when Ed's mother was asked to come to the school.

⁶ A. C. Rosen, "Treatment of the Disturbed Personality," *California Youth Authority Quarterly*, 10:24–29, 1900, and F. Redl and D. Wineman, *Controls from Within*, The Free Press of Glencoe, Illinois, 1952, 327 pp.

for a conference, she answered with a string of invectives and then lashed Ed with a belt. In a cold white rage, Ed broke each and every window in the house while his frightened sisters watched in terror, and then strode off into the city to lose himself among companions who at least understood him. The police who eventually picked him up did not have a quiet night. Ed was too violent to be put with the other delinquent boys and too young to be put among adult criminals, so in the end he was sent to the mental hospital. There he was placed on a ward with fifty-eight other boys, many of whom had serious mental illnesses. There was not enough personnel to give him the tolerance and support that he needed, and there was no way for him to achieve the little successes from which control may be built. The hospital psychiatrist did help him some by allowing him to express freely his fury and his total dissatisfaction with the world, but some of the benefits were more than offset by the imposition of the ward routine necessary for the survival of the other inmates.

At no time was this boy troubled by delusions or hallucinations, he had no seizures, no illness. He was always clear in his mind and completely in touch with his miserable world. By the time he was fourteen he was sufficiently adjusted to leave the hospital, but then the question arose as to where he should go. There was no place. To return him to his home, which had been a potent factor in shaping his personality, would have been fatal. To keep him longer on a ward with mentally ill and sometimes deteriorated boys would be almost as much a tragedy. No foster home would take him. The complete absence of any proper residential setting with adequate orientation toward rehabilitation is one of the greatest lacks in the treatment of these disturbed adolescents.

Some decades ago the term "psychopathic personality" was coined to describe certain types of extreme behavior disorder, but it was little more than a verbal tag. More recently there have been efforts to define the concept more clearly and precisely.⁷

Perhaps the first thing to do in describing this condition is to state what it is not. It is not a neurosis or a psychosis. There is a complete absence of delusions or other signs of irrational thinking. There is usually no indication of nervousness. There is no immediately obvious distortion of personality and no defect in theoretical reasoning. The individual shows no depression and no anxiety. His intelligence is usually normal and is sometimes superior.

The possessor of a psychopathic personality may have great superficial charm. To the casual observer he gives an appearance of complete sanity, and he shows in everyday situations an outer layer of acceptable functioning. This mask of sound mental health is, however, only a façade. Upon further acquaintance the psychopath shows his true personality. His condition reveals itself in five main types of reaction.

First, psychopaths are basically unreliable, irresponsible, untruthful,

⁷ H. Cleckley, *The Mask of Sanity: An Attempt to Clarify Some Issues about the So-called Psychopathic Personality*, C. V. Mosby Co., 1950, 569 pp., and B. Karpman, "The Myth of the Psychopathic Personality," *American Journal of Psychiatry*, 104:523-534, 1948.

and deceitful, even when they have nothing to gain thereby. They can lie without the slightest indication of discomfort. It is generally not difficult to convince them that some particular thing they have done is wrong. They admit their guilt cheerfully and often promise to do better, but then they continue to do exactly as they please.

A second characteristic is their extreme emotional shallowness. They may, for instance, go through the motions of making a fluent apology for some misdeed, but the apology is fluent because there is no feeling behind it. They have little affection to offer, and they often remain throughout life unattached to other people. They show neither remorse nor shame for even their most glaring misdeeds. Because they are barren emotionally, they are conspicuously callous and unfeeling in their treatment of others, not appreciating at all the emotional impact of their acts upon other people.

Third, psychopaths are essentially solitary people, unresponsive to interpersonal relationships. Their behavior is in general asocial rather than antisocial, although under slight stress they become antisocial as well. They are extraordinarily unresponsive to kindness from other people. While they have affairs with members of the opposite sex, these affairs do not seem to have any real emotional significance for them. Their sexual relationships are casual, trivial, and quite unimportant to them. They seem to have no capacity to see themselves as others see them, or to realize how other people feel about them.

Fourth, they are highly egocentric. Their reactions are made to gain pleasure and to avoid pain, without the intervention of such inconveniences as a conscience or an awareness of social pressure. They do what seems amusing to them at the moment.

Finally, psychopaths live disordered and purposeless lives. Even a consistent revolt is beyond their powers of organization. To be sure, they are sometimes defiant and explosive, but these manifestations are reactions to incidental blocking of some momentary desire. These people do not commit major offenses, although they are likely to be constantly in difficulty for minor infractions of the law, their most frequent clashes occurring because they are drunk and disorderly. They do not usually live lives of crime because crime requires planning, and psychopaths are thoroughly purposeless.

Presumably the psychopath's asocial, purposeless, and often self-defeating behavior is an expression of drives, disturbances, and conflicts that lie deep in his unconscious and urge him to self-destruction. For he does destroy himself as far as deriving either pleasure or value from life is concerned. The satisfactions of emotional life are denied him because he has essentially no emotions. The satisfactions that come from personal interrelationships elude him because what other people do, think, and feel are matters of no interest to him. He does not even seem to get pleasure or

relief out of his sins and misdeeds. He does not, for instance, drink to escape an intolerable strain or insoluble emotional conflict, he does not drink to be sociable, he drinks without obvious pleasure and in the same casual, purposeless way in which he does everything else. Alcohol promptly disorganizes him still further and urges him on into even greater uselessness. What a normal person cannot usually grasp is that the psychopath enjoys being disorganized and has no interest in improving himself. He is not ashamed of his life, it is his normal relatives who feel the shame for him. The psychopath does not act in a normal human way basically because he cannot seem to express or feel normal human emotions.

The two studies below describe the development of boys who are typical of this group of abnormal children and adolescents.

Ronald is now a boy of sixteen. He is an only child. His mother has been a semi-invalid ever since his birth. The father, a paint salesman, is away from home two or three weeks at a time during most of the year. Ronald's mother has always idolized the boy and has steadily refused to believe—in the face of evidence—any of the complaints made against him. In his preschool days Ronald was already so self-centered, so determined to have his own way, and so abusive at the first hint of restraint that other children would not play with him. When he was four years old he went up to a little girl who was peacefully walking along the sidewalk and pushing a doll carriage with her best and newest doll in it, snatched her toys away from her, pushed her carriage in front of a passing truck—which promptly demolished it—and smashed the doll into a hundred pieces on the curbstone. There were no adult witnesses of the scene, and Ronald's mother did not accept the little girl's version, as relayed to her by the child's mother. A day or two later, Ronald managed to clamber up on top of an ornamental gate at the entrance to the subdivision where he lived, lugging a fairly large stone up with him. He crouched there hidden for some time, until the little girl's mother came through the gate from the near-by market, he then rolled the stone off on top of her. His aim and his timing were bad and he did not injure her, but there was no doubt as to his intention. The following year, Ronald burst unasked into a kitchen, where two elderly maiden ladies were baking cookies for a church bazaar. He had smelled the cookies as he passed the house, so he just walked in and took a handful, although the women were complete strangers to him. When the ladies tried to stop him, he threw the whole tray of cookies on the floor and stamped on them. The ladies called on Ronald's mother that evening, but he flatly denied ever having seen them before, and she believed him. Episodes of similar nature continued. The summer when Ronald was six, he methodically trampled a neighbor's vegetable garden every week, stamping down every sprout he could find. The police finally caught Ronald in the act, but his mother would not believe the police, although she finally paid a fine, as she said, "to stop the talk" against her son. The next fall, Ronald went to school for just two days before he was expelled and brought into juvenile court for destruction of school property. Here he was given a Binet test and earned an IQ of 140—but he tore up half of the examiner's materials, spat on her when she tried to rescue them, and nonchalantly heaved a book end through a window-

pane, in full sight of the police matron who had come to escort him back to the courtroom

For the next year, Ronald was taught at home, at first by teachers who came after school hours, and then by his mother, since the boy sooner or later made a vicious attack upon each of the teachers. By this time Ronald's father had become greatly concerned about his son and made a real effort to control him, but his wife offset every bit of discipline by coddling Ronald, accusing her husband of cruelty, and refusing to accept any blame for the boy's misconduct. The tension between the parents mounted, until one evening when Ronald attacked his father with a kitchen knife. In spite of hysterical resistance from the mother, Ronald was arrested and taken into juvenile court. The court sent the boy successively to a detention home, to two foster homes, and eventually to a reform school. Kindness and firmness proved equally ineffectual. Ronald remained completely selfish, determined to do as he pleased, and vindictive when crossed. He has been in reform school for eight years. What he has learned during this time is to be more cautious, more subtle, more crafty, and more cunning in his attacks upon people and situations. No modification of his fundamental personality seems to have taken place.

This boy has been through a series of experiences that should have altered his behavior, but he seems to have changed none at all, except to become more dangerous, more determined to have his own way, more resistive to discipline, more tortuous in his thinking, and more boastful. He does not even have enough normal feelings of affection to appreciate his mother's blind devotion, but callously capitalizes on it. Ronald displays in an unusually clear way the great vitality, the ceaseless drive, the egocentricity, the resistance to modification, and the callous insensitivity that characterize the psychopathic personality.

George V is probably the least worried man in his office and certainly no one who saw him striding confidently down the street on his way home to his latest wife would note anything obviously abnormal about this attractive man of thirty-five. Of course, no one in town knows him very well, because he arrived about a month ago, talked his way rapidly into an insurance office as an "experienced salesman" and in a whirlwind courtship married a young schoolteacher who found his dashing air and bright chatter irresistible. The men in the office are sometimes uncomfortably aware that he seems to know very little about insurance, but there is no denying that he charms the customers—often right from under the noses of salesmen who had been working up a careful program with them—and gets their signatures on his credit lists. Currently he is top man in sales of policies, but the boss has a queasy feeling that many of those policies will not be sustained long. The young wife is feeling some misgivings, too, since a letter which was forwarded from another state proved to be a demand for support of two children George had neglected to tell her about. However, if George's usual pattern holds good again, it should be several months before things begin to fall apart so obviously that he will quietly leave some night for destinations unspecified.

This is a very well-established pattern now, and George is quite comfortable with it. Except for one close scrape with the reformatory when he was twelve,

George has never been in trouble with the law and probably will not be in the future. He is moderately intelligent, attractive, healthy, undisturbed by doubts about himself or others, and utterly unable to understand why an occasional victim of his way of life is terribly upset, particularly if it is a woman who protests that she took their marriage vows seriously. If he does come up against legal trouble, it may well be because he has lost track of the proper succession of divorce-marriage-divorce-marriage and neglects to include one or the other step. He has been in and out of four marriages so far, and the end is not in view. As an adolescent he found his charms were enough in demand to exact sexual surrender as part of his "price" with the attractive but loose-moraled lassies he dated from the age of eleven, when he left school. Then it became more advantageous to him to establish a reliable source of meals and attention, and he married a very young barmaid who saw in him an arrogant hero. After their daughter was born, and took some attention away from George, he decided things were getting dull and joined the Army without bothering to tell his wife. He did not get in any serious trouble in the Army, but as soon as his enlistment was over he left for the southern state where he was born and fast-talked himself into a job far beyond his educational capacity. Some of the town oldsters remembered George with sympathy as the lad whose father died in an asylum and who as a tiny baby was placed in a seemingly endless succession of foster homes while his mother sought to support him. Others remembered him a bit harshly as the "little devil" who manipulated every susceptible kid in town into trouble but seemed to keep clear himself. Finally, someone recalled that he had walked away from an accident that killed his "best friend," and that while he had been cleared of responsibility so far as the crash was concerned, he talked a lot about how sorry he was for the friend but he had not, in fact, stayed with him while he was pinioned under his car and had never once visited the bereaved parents. On the whole, the town was glad to see George leave when he became bored with the job just before his employers decided his social talents could not compensate for his neglected tasks and they agreed to accept his resignation—with relief.

How long this sort of thing can go on may be doubtful. In any event, it is of no serious concern to George. He expects to "get by." Probably he will.

The Disturbed Adolescent with Somatic Problems It is becoming increasingly evident that physical and mental health are interrelated and affect each other. As more is discovered concerning the biochemical functions and dysfunctions of the body, the importance of the emotional and mental condition of the individual is becoming ever more apparent.⁸ Already there is an enormous literature in this vital and comprehensive field, and the results of such research will eventually be of great value in the education as well as in the physical care of coming generations. What the teacher needs at the moment, however, is an awareness of the general situation. Although it is now considered probable that particular physical conditions neither

⁸ See, for example, F. Dunbar, *Emotions and Bodily Changes* (Columbia University Press, 1957), and F. Alexander, *Psychosomatic Medicine: Its Principles and Application*, W. W. Norton Company, 1950, 300 pp.

cause nor arise from particular emotional traits, as was at first supposed, almost any physical condition can be triggered by almost any emotional disturbance and almost any emotional disturbance can be made more acute by almost any abnormal physical condition. That is, there is a general rather than a specific interrelationship.⁹ This interdependence is shown in its most dramatic form when a perfectly normal person is given a specific drug and becomes for some hours mentally ill, with all the symptoms of a genuine psychosis. It is probable that psychological, chemical, hereditary, and environmental factors and pressures coexist in an individual and that a disturbance in one set of components produces a disturbance in others. It is as yet not altogether clear by what process the underlying emotional problems of a person become transmuted into physical symptoms, but it is inescapably clear that this transformation does take place.

As an example of how these conditions arise and develop, it may be best to consider an extreme type of case. One reads once in a while in a newspaper about a girl who has literally starved herself to death by adhering to a rigid reducing diet. The matter is not quite that simple. The trouble often begins when a girl who is sensitive about her appearance and has some glandular imbalance first develops the usual feminine curves. She becomes disgusted at what she considers being altogether too fat, and she may actually be somewhat overweight. Her discontent is probably intensified by her confusion about sexual matters, and she may associate sex and eating, if she rejects sex, she is likely to displace the rejection by applying it to eating. As she diets, she gets into violent, damaging struggles with her family. The whole thing may become associated with her growing sense of independence, and she may feel that a capitulation will return her to a childish dependence upon her family. So she diets until she becomes almost a skeleton. At this point, the physical complications of starvation begin, and she cannot eat, even if she wants to, or else she vomits what she does eat. Her ego defenses break down more and more, her body gets weaker and weaker, and she dies either from an infection to which she has no resistance or literally from starvation. Even if she manages to survive, a pattern has been established that is likely to be followed again when she meets the next emotional strain. The psychological and physical factors reinforce each other in such a manner that this disease furnishes an excellent example of psychosomatic interrelationship. It should be noticed that the situation develops at a time when the girl is especially vulnerable—that is, in her early adolescence.¹⁰

It is possible that a series of personality profiles would give a fairly accurate measure, by means of which one might identify those adolescents

⁹ Dunbar, *op cit*, p. 751, and J. I. Lacy and R. van Lehn, "Differential Emphases in Somatic Response to Stress," *Psychosomatic Medicine*, 14: 71-91, 1952.

¹⁰ For good illustrations, see Dunbar *op cit*, pp. 79, 323, 325, 754.

who are especially susceptible to this translation of emotional problems into physical symptoms. If a teacher can obtain such profiles from the psychiatric service in her school, she should certainly examine them with care, since she may get clues to the fundamental problems of pupils who show such symptoms as diarrhea, vomiting, or asthma. Temporary manifestations are, of course, common: the boy who has a football game to play in the afternoon is likely to be sick during the morning, as is the girl who wants desperately to play a certain role in a play, for which try-outs are imminent. But these situations are only temporary, and so are the symptoms. They make clear, however, what may happen to the boy or girl with an unsolved, constant problem: the football game will soon be over, and the dramatic role will soon be assigned, but the unsolved problem goes on and on.

The relation between maladjustment and physical symptoms is shown by a number of studies. In one instance of 110 consecutive cases of dyspepsia, only 2 showed a normal personality. The majority tended to be either very passive or very aggressive, and a good many were compulsive as well.¹¹ The emotions that act as causes are all of the depressing or aggressive types: anxiety, fear, worry, feelings of inferiority, guilt, hostility, jealousy, and hatred.¹² Apparently no one ever developed a psychosomatic disease by being continually happy. Good-natured, jolly, happy-go-lucky people do not have stomach ulcers, even though they overload and abuse their digestive systems, but the chronic worrier and misanthrope can develop them on a diet of poached eggs and milk toast.

Prominent among the situations that are likely to cause maladjustment, which in turn may be converted into physical disease, is that complex of stresses and strains that are lumped together under the term "maternal rejection." Since the need to be loved is extremely strong, the rejection has a profound effect, although it may take an indirect form of expression. One physician who studied sixty-three children that showed clinical symptoms of asthma, hay fever, or eczema, and compared them with thirty-seven nonallergic children, found maternal rejection to be of overwhelming importance.¹³ Of the sixty-three allergic children, 98 per cent were rejected, of the thirty-seven nonallergic, who were also patients but with other complaints, the figure was 24 per cent. In a more or less comparable group of unselected school children, it has been reported to be 13 per cent. A quotation from the report is, however, more convincing than any figures:

¹¹ S. R. Rosen, H. Weinberg, H. Keosian, I. R. Schwartz, and J. A. Halstead, "Personality Types in Soldiers with Chronic Non-Ulcerating Dyspepsia," *Psychosomatic Medicine*, 10: 156-164, 1948.

¹² O. S. English, "The Nature of the Emotional States That Disturb Bodily Functions," *Pennsylvania Medical Journal*, 52: 689-691, 1949.

¹³ H. Miller and D. W. Baruch, "Psychosomatic Studies of Children with Allergic Manifestations. I. Maternal Rejection. A Study of Sixty-Three Cases," *Psychosomatic Medicine*, 10: 275-278, 1948.

Some of the mothers stated that the children were "accidents" and that they had not wanted them. Said one, "He was an accident. I hated having him. I didn't want him and I wouldn't look at him for at least three days". Said another, who had never cuddled or played with her six-year-old child, "When she was a baby I could at least put her in bed and out of sight and forget I had her."

"Still another said of her eight-year-old, "I didn't really want her. I was scared to have her. I've just existed since she was born. If anybody mentions having a baby I think they're crazy." Incidentally, this mother had from the child's birth turned over her entire care to a relative.

Resentment in a good many women was unmasked. The mother of a small, blonde three-year-old gritted her teeth and muttered, "I actually felt I could kill her. I wanted to throw her against the wall and bash her brains out." The mother of a boy almost seven exploded, "I've no other children, thank God! He almost killed me when he was born. I should never have had him. I'm a nervous wreck. He makes me ill. Physically ill. I spank him till he gets nervous and I get nervous. I threaten to send him away. He's driven me to distraction. Just mad."

Sometimes a mother revealed the fact that she had gone to extremes in showering care and attention on the child to hide from herself the feelings of rejection, using an overprotective, oversolicitous attitude as a cover-up. Such was the mother of a six-year-old boy who claimed her "every breath was for her child" and that she would do anything in the world to make him well. In an interview she admitted that he had been unplanned and that "it was terrible having a baby and knowing nothing about them." Later, when it became clear to her that her own sexual maladjustment might be causing tension enough to upset the child, she suddenly lost control of herself and burst out, "It's one thing if he were sensitive to eggs, I would do something about that. But if it's my sex life that's affecting him, he can just go on coughing the rest of his life!"¹⁴

It does not take much imagination to realize that a child who is exposed for years to such maternal attitudes is likely to develop abnormalities and distortions of personality.

Stephen, at thirteen, would have been the handsomest boy in his ninth-grade class if he had not been disfigured by the constant oozing of skin eruptions that turned his olive skin into a pulpy, sore, itching mess. Several other boys in his class frequently had pimples and one or two had acne, but Stephen's case was so much worse than theirs that he was the butt of all the jokes from those slightly less miserable than he, and he was anathema to the girls. The school nurse had made repeated efforts to interest Stephen's mother in medical attention for the boy, but was met by a rather frightened insistence that the situation "was all Stephen's fault because he won't stop clawing at his face." Also, she insisted that the boy's father would never pay out good money for "a lot of medical nonsense."

One day the teacher noticed blood running down onto Stephen's collar and sent him to the school nurse, who bandaged the skin break and then arranged for him to talk with the school psychologist. Among other things, the psychologist

¹⁴ Miller and Baruch, "Psychosomatic Studies of Children with Allergic Manifestations," *loc cit*, pp 276-279. Used by permission of the publisher, Paul B Hoeber, Inc.

asked Stephen to draw a picture of his family, with results shown in Figure 101. He drew his mother as a meek and gentle person, her hair being made black presumably to emphasize her Italian darkness with which her husband was forever taunting her. His stepfather was drawn as a big bruiser, although he was in fact a small sturdy man. Stephen drew himself as falling—and possible giving a covert kick as he fell—and blotted out his face. Subsequent conferences brought out much hatred of the brutal stepfather and an ambivalent attitude toward his mother. He adored her and bitterly resented his stepfather's treatment of her, but he was also annoyed with her for putting him into such a difficult situation. He had always had an oily and easily infected skin. As he entered puberty, he had tried to scrub his face extra clean, but had been mocked by his stepfather as “trying to be a Latin lover.” Stephen could not fight back directly at his stepfather, because the latter was too menacing. His rebelliousness and confusion acted as triggers to his skin condition.



Fig 101. *Drawing of a Family*

This lad did not recover a normal skin until some time after he ran away from home, and not immediately then, since he presumably met new problems, but eventually, as his unhappy home receded into the background of his consciousness, his skin did clear, although there will always be scars from the infections. There will also probably always be emotional scars, and it is likely that any later difficulties will follow the pattern already established.

Every teacher has pupils or friends who react to strain by having physical ailments. In mild forms this type of manifestation is common. Some pupils have stomach upsets, some have skin eruptions, some have difficulties of breathing, some have violent headaches, some cannot eat. The particular connection is partly accident and partly predisposition. To the outsiders the symptoms often look spurious, but they are not. The vomiting is real, the skin condition is real, the asthma is real, the headache is real. But the fundamental cause is emotional.

Some somatic upsets involve very deep levels of personality and are appreciably nearer the true psychosis than the type of condition just described. One such condition is hysteria. The sufferer commonly has a wholly or partially paralyzed hand or arm or leg, a condition for which no physical cause can be found. In general, the member or organ involved has some symbolic meaning for the individual, although the situation may

make no sense to the observer. In fact, sometimes the affliction seems downright silly. The appearance of such symptoms occurs through a mechanism called conversion, that is, the emotional response is "converted" into a physical symptom, presumably because the former is too painful. A classic case is that of a girl who hated her father and was constantly in secret dread that some day she would lose control and kill him, instead, she woke up one morning with a paralyzed arm. The immediate value is obvious, but the paralysis is only a temporary solution, and the fundamental problem has merely been avoided, not solved. The study below shows some of the typical causations and symptoms.

Miss S, an attractive but very thin woman of thirty-five, is at present paralyzed in her legs and has been in this condition for the past six months. There have been three previous periods of paralysis, at the ages of fifteen, twenty-one, and twenty-seven.

From her earliest childhood, Miss S had been the only child of a widowed mother, who was both adoring and oversolicitous. One cannot perhaps blame the mother too much for her attitude, since her two sons, older than Miss S, and her husband had all died. She therefore clung to her one remaining child, babied her, watched her solicitously, and gave in to every whim. As a child Miss S usually got her own way without much effort, but when she did not she had tantrums, during which she became rigid and seemed to be almost unconscious. This technique for reducing her mother and her teachers to submission continued until the girl was about twelve years old and tried to use it on her age-mates, who merely laughed at her and advised her to grow up. The first attack of paralysis came on during her first year in high school. She was barely passing most of her courses, she had not been encouraged to participate in the activities of the school, she had no boy friends, and she was quite isolated and unpopular. Instead of dominating her surroundings as she did at home and in her small elementary school, she found her surroundings threatening to overwhelm her. Her response to this situation was to become paralyzed and thus to withdraw from a situation that seriously threatened her ego. Doctors could find no cause for her condition. After some weeks of comfortable invalidism and of being the center of her mother's attention, the girl recovered the use of her legs—but she did not return to school.

Since the mother and daughter had only a very small income, Miss S was encouraged to find at least a part-time job. She tried a half-dozen positions, as cash girl, bundle wrapper, waitress, and clerk, but she was unable to hold any job for more than two or three weeks. After each failure there was a good deal of weeping and complaining, until the girl had succeeded in displacing all blame from herself to her employer. The daughter's earnings were so erratic and inadequate that the mother took on a regular job from ten to two making sandwiches at a soda fountain in the neighborhood.

By her eighteenth year Miss S had persuaded herself that she was not strong enough to work under usual conditions, but since she had a good deal of spare time she began to do volunteer work in various church organizations. The other workers soon discovered that she volunteered only for what she wanted to do and

was completely irresponsible if given any other type of work. She was tolerated but not liked. At this point a young curate fell in love with her. To everyone's surprise the engagement went on and on for three years. Always Miss S. had some excuse for not setting a date for the wedding. Finally the young man became tired of waiting and insisted upon a definite date within the immediate future being chosen. The next day Miss S. was again paralyzed and remained so until after she had persuaded her fiancé that she could never be a proper wife and mother. After being released from her engagement she recovered the use of her legs. When she was twenty-seven, the same episode was repeated. In this case, she had become engaged to a young dentist in whose office she had worked afternoons as receptionist. Miss S. enjoyed the attention she received during her engagements, but she feared marriage, loathed housework, dreaded possible motherhood, and regarded sexual activity as dirty and indecent. Both engagements were terminated by a retreat into hysteria.

This woman has shown certain traits almost from birth. She is remarkably self-centered, she craves constant attention, she cannot bear competition, she is determined to have her own way, she explodes when she is blocked, and she is of dull-normal intelligence. She desperately wants more attention than her mediocre talents are likely to obtain for her, she is not bright enough to be scheming or to think out satisfactory rationalizations, and she cannot retreat into fantasy because she is dependent upon real people for her satisfaction. Her early habit of domination through tantrums has therefore become a fixed type of response, growing more extensive as her problems become more serious.

The Adolescent with Deep Involvement of the Personality Many adolescents, confronted with a world that seems to them too difficult to understand or adjust to, retreat into a dream world for refuge or comfort. In fact, practically everyone does so in a modest way from time to time. However, the degree of the retreat, its frequency, and the extent to which it involves the whole personality vary enormously. Whether one drifts off for a few minutes into a fantasy about a cool day at the beach—when the office is hot, loud, and hectic—or flees back to the infant's inability to feed himself—when years of deprivation have made the failure of a final attempt at self-identification unbearable—probably depends in large measure upon the degree to which the individual followed a normal pattern of development up to the point at which the stress became too great to bear. The consistent tendency to meet problems by withdrawing from them is very dangerous, because it produces an ever-increasing inability to meet the next problem and sets up a pattern that will lead to worse trouble as time goes on. Such a person has no experience with the successful meeting and conquering of problems in the past. When a child has unpleasant and unsupported experiences at an early age, he may develop no patterns for meeting everyday difficulties, since he has few resources, and since life keeps presenting him with more and more complex problems as he grows older, he becomes overwhelmed and tries to retreat further and further into child-

hood and infancy in order to reach a level at which he can find security. This habit of retreat from an impinging environment, which is seen as painful and confusing, takes a great part of the victim's energy and attention, so that he becomes socially isolated, moreover, he has never developed the necessary basic skills, because he has been retreating all his life. The withdrawal itself walls him off more and more from the possibility of having normal experiences in human contact, emotion, and satisfaction. The terribly quiet child in the classroom who wants dreadfully not to participate is exactly the one to whom the teacher needs to pay attention because he may be retreating to an unreachable level.

Sometimes the withdrawal is relatively mild. While destroying some of the individual's potential usefulness to society, it may nevertheless serve as a basis for existence of a sort, and never go further. Even in mild instances, however, it is clear that the personality is deeply involved. The social isolate in the schoolroom who grows up into a reticent, retiring, unobtrusive adult and lives a solitary life, working at some task well behind the scenes where adjustment to people is not too essential, is a good example. He or she is emotionally sick and could be helped by therapy, but the case is too mild to come to official notice for years, if ever. Those pupils who are developing such a withdrawn personality are no trouble to a teacher, except that sometimes she cannot get their attention.

Typically withdrawn adolescents, as a group, come from a family background that is significantly different from that of normal boys and girls. The differences give some suggestion as to probable causation of the observed deviations of personality. Thus, in one study the homes of 138 young neurotics were compared with those of 370 normal college students. Several bases of comparison were used, as shown in Figure 102. The first three items dealt with physical inheritance and indicated that there was some hereditary basis even for the neuroses, which do not arise from physical causes. Other items showed that the parents did not get along together, and that the neurotic was rejected by or was in conflict with his family. The least difference between the two groups was 13 per cent, in five items it was 30 or more, in 3, it was 40 or more, and in one it was over 50.

In recent years there has been a good deal of research into the home background of those young people who have become schizophrenic. There seems to be moderately high agreement among some investigators as to the character of parents and the nature of parent-child relationships in the homes that contribute to this type of mentally ill individual. To put the matter in a nutshell, the father is a nonentity, the mother is either overtly or covertly rejective, and the child is not wanted. Most of the research has concerned the mothers, partly because they were the dominant parent in the homes studied and partly because mothers are the central figures in a child's environment during the early years of his life, when his basic traits

are developing Upon adequate study, the mothers divide themselves into three distinct types which have in common a basic rejection of the child, although the forms of rejection are different

The first is the openly hostile, domineering, aggressive mother who does not want to be bothered with her child and simply neglects him These women are severe in their discipline, they constantly emphasize their child's shortcomings, they compare him unfavorably with others, they are emo-

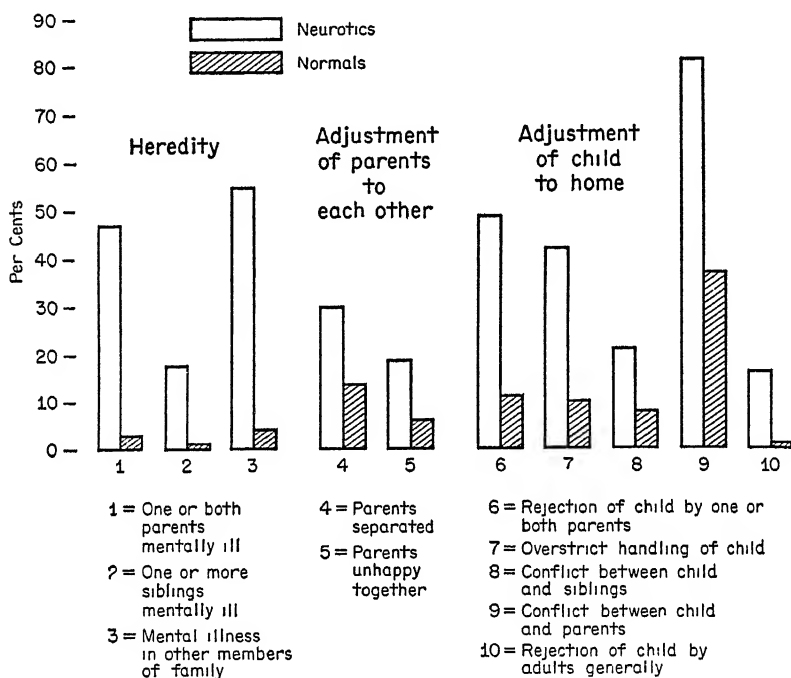


Fig 102 *Family Backgrounds of Neurotic and Normal Individuals*

Based on figures in H V Ingham, "A Statistical Study of Family Relationships in the Psychoneuroses," *American Journal of Psychiatry*, 106 91-98, 1949

tionally cold, and by nagging, threatening, and ridiculing him they openly express their attitude by showing scorn or disgust at behavior that is entirely normal for their child's age Quite often behind this attitude there is a burning resentment because the child's birth thwarted some ambition of the mother's, or a profound disgust on her part toward sexual relationships, or a fierce resentment toward the pains of childbirth In short, the child has, in his mother's view, wrecked her life or caused her unnecessary shock and pain, and she never forgives him for it The second type shows quite different reactions These mothers are overanxious, overprotective,

and oversolicitous. They baby their child, fuss over him, protect him from the ordinary hazards of childhood, keep him away from age-mates, prevent him from growing up emotionally, and generally surround him with what is often referred to as "smother love." This behavior looks like the exact opposite of rejection, but there is reason to believe that it often arises from the same sources as openly rejective behavior and is, indeed, mainly a guilt reaction. Such a mother can never do enough for her child because she can never escape the feelings of guilt that come from an unconscious hostility and rejection. Her maternal overprotection is therefore a defense against herself, and she cannot relax it lest her shameful guilt of not wanting the child overcome her. Other overprotective mothers have different motivation, although their treatment of their children shows no significant differences from that just described. They are not compensating for an underlying hostility. They have identified their children with themselves, concentrated their whole lives upon them, and they protect them as they would protect themselves. An overprotective mother smothers her child just as completely, whether her behavior is "pure" or "compensatory." A third type of mother, whose behavior may push a child along the path toward schizophrenia, is the perfectionistic type. She is very ambitious for her child, she demands perfection from him, and her standards of behavior are higher than any small child can reach. She puts her faith in a rigid schedule and rigid training. She loads her child with cultural "extras"—music lessons, dancing lessons, singing lessons, riding lessons—she insists fanatically upon good manners, and she pushes her child into superior social groups if she can. She is prim, proper, and prissy. She regards sexual interests as disgusting and sinful. She is oppressively righteous. She is concerned with the externals of life and with fitting her child to take his place in her social world, but she is stingy with expressions of affection. Thus she wants her child to achieve the impossible, she constantly urges him on to greater efforts, criticizes even his best performances, and she denies him any real reward by denying him love. These three types—the hostile, the overprotective, and the perfectionistic—may exist either separately or in several combinations. Perhaps the worst complex of traits is shown by the mother who is both rejective and perfectionistic. She is cold, hard, critical, severe, domineering, restrictive, rigid, righteous, and ambitious. In her defense, it should be said that she is usually the product of a childhood quite as unhappy as that of her children.¹⁵

The history below tells briefly the story of a girl who is moderately withdrawn from life. She is still in some contact with reality, but the pattern of withdrawal is already apparent.

¹⁵ S. Reichard and C. Tillman, "Patterns of Parent-Child Relationships in Schizophrenia," *Psychiatry*, 13:247-258, 1950.

Helen Masterson is fourteen and in the eighth grade where, with a Binet IQ of just a shade above 100, she is scraping along with D's that come dangerously close to failures. She is a quiet soul who never misses a day of school, never requires correction. You might call her "colorless," though it is more likely that your comment would be "I'm sure that she'd be interesting if I could get to know her." She is never impolite—answers any question you ask, quietly goes through with any task that is assigned. She comes to school on the bus, withdrawn and shy, having practically no contact with the others. If you watch her there, or in the schoolroom, you *guess* that she is dreaming through a quite satisfactory world of her own, if you speak to her, there is just that little hesitancy before the reply, as though at the moment she had been thinking of something else.

And it is the same at home. The oldest of three, Helen is very different from her two younger brothers, who carry on a constant running noisy fight. She is helpful about the house, her mother says, "She's always willing to do what I ask, even if her nose is always in a book." In spite of her lack of companionship and her constant struggle to keep from failing in school, one could not really call this youngster unhappy. There is an expression of placid acceptance on her face that means that her world is one of satisfaction.

One cannot help wondering why. We do not know just what part the father plays in the whole situation. A persistent drinker, he has always kept the family fearful and on the verge of poverty. With a drink or two he is mean, bristling, argumentative, while he does not manhandle his family, his homecoming means a noisy fight. The mother is a nervous, tense, energetic follower of prescriptions. When Helen sucked her thumb, Mrs. Masterson "tried everything" she'd ever even heard of. For several months she sent the child to school with a milk bottle and nipple securely tied about her neck. A social worker visiting the home always had to listen to a long tirade about the child's bed-wetting or her long, quiet playing with dolls—with Helen in the room, learning what the world thought of her.

One scarcely dares to forecast the future—no one even knows what the present is. This quiet conformist has certainly long since retreated to a daydream life that is quite adequate for her needs. Admittedly, it is of this stuff that schizophrenia is made, such people go completely into a life of unreality if the problems which they have to meet seem to offer no real chance for success and growth. But we cannot predict this sort of insanity with assurance because so many of our friends or co-workers are trudging along as Helen is, ritualistically meeting the demands of a job, sometimes even of family life, always living in a dream of how things might have been or of how things some day will be. People such as Helen never make trouble. If they go to a mental hospital (and several hundred thousand do take that road each year), they show up on our tax bill, if they quietly conform to society's demands, they are perhaps equally expensive in what they do not contribute to the country's growth, if they marry, they fail to bring to spouse or children any richness of experience.¹⁶

Finally, there are adolescents who are more seriously withdrawn than the relatively mild type just described. These youngsters show deep involve-

¹⁶ J. F. Plant, "Who Is the Delinquent?" *Forty-seventh Yearbook of the National Society for the Study of Education*, 1948, Pt. I, pp. 20-21. Quoted by permission of the Society.

ment of personality and are in desperate need of help, which their homes cannot furnish. Almost their only hope of avoiding a life of distress and complete uselessness lies in an early recognition of their condition by a teacher. If their tendencies are unchecked they are likely to travel further along the same road and end with a diagnosis of "schizophrenia."

When a psychiatrist investigates the history of a schizophrenic patient he is likely to be struck with the long period of time during which symptoms that are obvious to him have existed without recognition. Sometimes the future schizophrenic is identifiable by the time he enters school. He had already developed the traits of the "shut-in" personality, that is, he is isolated, asocial, apathetic, dreamy, inattentive, and a bit queer. His retreat from reality has already begun. He does not quite sense what goes on around him, and he is not quite sure what is real and what is fantasy.

In one state hospital an investigator found sixty-six young adult schizophrenic patients who had been sent to a school clinic when they were in the third, fourth, or fifth grade.¹⁷ Their average age was only ten years at the time, but 48 per cent of them were already apathetic, inattentive, and indifferent, 20 per cent had odd attitudes or mannerisms, 17 per cent were markedly shy and fearful, and over 66 per cent were asocial and seclusive. The psychologists who examined them foresaw trouble, but a school clinic can only recommend changes to teachers or parents, it cannot enforce them. Since "shut-in" children have altogether too little overt behavior and since none of it is of the destructive, delinquent type, they do not come under court jurisdiction and cannot, therefore, be forcibly removed from their home environments. Nor do these children revolt against their homes and families and thus sever the bonds of their own accord. Presumably the parents of these sixty-six children did not succeed in changing their children's attitudes, assuming that they tried, and the seclusiveness increased until, during adolescence, it separated them from normal life. With so much warning, it seems as if those children and adolescents who are showing such deep involvements of personality might be located before the condition becomes serious and the pattern of response fixed. Perhaps the basic trouble is that these children are too "good." One cannot altogether blame a mother or a teacher who is glad to have one child in a home or a schoolroom who never makes demands, never misbehaves, never asks for help, and never requires more than casual attention. The main hope lies, however, in recognition and prevention, and much could probably be done if adults can learn to realize that the "calmness" they may see is the calm before the storm.

¹⁷ P. Whittman, "Diagnostic and Prognostic Significance of the Shut-in Personality Type as a Prodromal Factor in Schizophrenia," *Journal of Clinical Psychology*, 4:211-214, 1948.

Merritt L., at fourteen a tall and rather attractive boy who was in the seventh-grade class for retarded children, came to the attention of a clinic through the careful observation of the teacher and school nurse in his junior high school. They noted that although Merritt had been placed in a special class, supposedly in the range of his mental capacities, he might as well have been placed on a mountain crag for all the contact with the class that he showed, except on all-too-notable occasions when his usual air of sulky distraction was dissipated by an explosion of aggression which on one occasion literally broke the windows of the schoolroom! These episodes of rage were very rare, and almost offered a relief to the ordinary problem of Merritt's effective immunity to suggestions (good or bad) from teachers, peers, or even the insistent reminders of the bells, buzzers, announcements and instructions which directed the classes impersonally during the day over loud speakers which were clearly not loud enough to impinge on his attention. He really did not present very much of a behavior problem in class, it was, in fact, his very lack of activity that finally convinced the teacher that more than lack of intellectual capacity was bothering Merritt. Of the many things which this might indicate, the teacher was inclined to favor the theory that there was some physical problem, unrecognized in his casual school health examinations, which made it impossible for him to respond to the stimuli around him. Therefore she sent Merritt to the school nurse, who, failing to establish the presence of either serious hearing or visual handicaps, referred him to a children's clinic for further workup, requested the mother to get in touch with the clinic, and sent the clinic a resume of the findings of the school up to that time. Interestingly enough, the record did not contain any comments concerning possible emotional disturbance, although several intelligence tests had been given in an effort to place Merritt where he would be able to get some benefit from the school program.

The first efforts of the clinic to make contact with Merritt resulted in both frustration and an unexpected source of aid. Although it was customary for the clinic to allow the parent to make the first contact, the urgent concern of the nurse led to a decision to approach the mother after a month had passed without any word from her. The telephone interview, slender as such evidence necessarily is, indicated immediately that a very much disturbed mother was certainly part of Merritt's problem. The social worker suggested that the mother might feel better able to consider the boy's problem if she came to the clinic to discuss those aspects which she herself felt should be looked into. When she finally appeared, after three broken appointments, she was accompanied by her husband—her fifth husband, it was emphasized. The pretty redhead of twenty-nine was anxious to emphasize that this was a formal and permanent arrangement, not one of the casual alliances which she had learned were regarded with something less than enthusiasm by the many agencies with whom she had been in contact for most of her life. The new husband seemed to have a serious interest in Merritt, and had voluntarily come to discuss the matter. His presence was fortunate, for it soon became clear that the mother was unable to present a coherent story between recurrent bursts of tears and protests that if Merritt could only learn to tell time so that he could get home at the proper hour, he would not "keep gettin' in with them bad influential kind of kids," and would be much easier to manage, and "more happier too." The poor girl was really upset about her son, but being little more

than a bewildered and emotionally confused child herself, her reactions to him swung between sobs of fear and outbursts of rage. Her bewilderment, however, was probably no more than Merritt's, for by minimum estimate he must have had at least seven "fathers" in the ten years since his mother's brief encounters with his own natural father terminated violently and permanently. Also, he had been in at least two foster homes during his mother's hospitalizations for mental illness of a suicidal nature. The current father-figure was an earnest, dull, hard-working young man of twenty-three, who had married this really dazzlingly attractive girl in a whirlwind of infatuation and suddenly found himself trying to cope not only with *her* wild and desperate need for love and protection, but also with Merritt, who had begun to regard every man in the house with fear, hate, and a deeper withdrawal into his own miserable longings for the same love and protection which drove his mother frantically from one affair to the next. Between affairs and husbands, the mother clung to her son for her emotional needs, but, since the child was of course unable to give her insatiable demands for reassurance any support, she would turn on him the full fury of her own confusions and would make fantastic demands for "making a good impression" whenever a likely man for marriage was around. Her present husband had not attached any ominous meaning to the youngster's pale silence and lack of interest and friends, when he had seen him before the marriage. However, as he announced dryly, he had learned fast. The evening before, Merritt had suddenly pulled a switchblade knife from his pocket, during an apparently quiet evening meal, and had stated that he would show them how he would deal with anyone who "bothered" him. He had made no specific threats against either his mother or his stepfather, but he had seemed altogether too enthusiastic about slicing up imaginary enemies. The young man had persuaded the boy to hand over the knife without any real resistance, and Merritt had gone off as usual to watch television with unseeing eyes. However, the young stepfather had insisted upon an immediate visit to the clinic and agreed readily to a complete examination of the child.

Allowing for his very irregular life, and overlooking his unkempt, dirty condition and a lethargy from which he could barely be aroused to respond monosyllabically to the doctors' questions, Merritt was physically in remarkably good health except for the presence of some malnutrition. He seemed to know simple facts, to be aware of where and who he was, and to have common-sense responses to most questions—yet one had the strong impression that he simply was absent from the discussion. The difficulty in obtaining his attention which the teacher had noted was not, the subsequent tests showed, a matter of deficiency in any measurable physical faculty. Merritt was hard to reach because the life that was vivid to him was elsewhere, it was an inner world less harassed by circumstances than was the only outer world he had known. Unfortunately, neither of his parents could come near to grasping this, and his mother was terrified of seeking psychiatric aid because she was convinced that Merritt would be taken from her and that she herself would be removed from the warmth of her new husband's affection to a hospital ward. Quite understandably, she could not face this prospect. Merritt went back to his uneasy home, his special class, and his fantasies of destruction.

Fortunately, the clinic had obtained permission to report its findings to the

referring school, and a conference of Merritt's teacher, the school clinical psychologist, and the consultant psychiatrist was held. As part of the school program, clinical testing could be done to help to establish a diagnosis without involving the confused parents. The teacher was asked to make a careful report of the boy's classroom conduct as well as an academic evaluation. When all the reports were in, there was little doubt that Merritt was a schizoid child, possibly of at least normal intelligence, with a very thin veneer of defenses against an impossibly difficult home life, and profound confusions over his own adolescent sexual developments in relation to both his mother and the role of the male in social and personal problems. He was unable to define for himself an identity that would hold up under the conflicting pressures of outside demands, possibly because he had been so deprived of any satisfactory response to his own needs since infancy and was unable to count on enduring warmth from the mother who was the only constant (if hardly stable) figure in his life. However, at that time little could be done in school without the co-operation of the parents. Monthly reports from the teacher indicated that Merritt was not even doing the level of classroom work which he had "successfully" managed for several years in the past, and that he was beginning to disturb the class by laughing at comments which were not in the least intended to be amusing and by singing quietly to himself. Just about the time the psychiatrist decided to move toward consultation with the parents concerning commitment for Merritt to a hospital for care, the boy became absent from school. A home visit showed a deserted apartment. The stepfather had left his work a few weeks before. Neighbors reported that the mother and boy left for a "vacation" in a neighboring state shortly after that. Somewhere in the limbo of their wanderings this tragic pair will come again to an agency for the help they desperately need, probably cannot make good use of, and should have had much, much earlier if the loss of both lives is to be avoided. It is imperative that research and supportive care be developed to avert such losses.

Once the withdrawal pattern is well established, the withdrawn adolescent has little hope of emerging with a normal adjustment to life, even after treatment. Since the deviate of this type has never made an adequate adjustment to the outside world except for his own primitive needs, he does not have the resources to make use of further experiences, because all situations come to him already distorted by his faulty contact with reality. Two investigators¹⁸ cite the case of a young man who had been admitted to a mental hospital at the age of eleven and had been given all kinds of treatment. After about two years he was able to return home and to maintain himself after a fashion. But when seen again some ten years later he had remained anxious and apprehensive, he showed only infantile emotions—such as his desire to marry some older woman who would look after him (that is, to find a mother-substitute)—and he still felt both himself and the world to be unreal. His recovery is about as good as can be expected under the present treatments, although new chemical approaches may be more

¹⁸ A. M. Freedman and L. Bender, "When the Childhood Schizophrenic Grows Up," *American Journal of Orthopsychiatry*, 27: 553-566, 1957.

rewarding. It is therefore necessary to identify the withdrawn child as soon as possible, before his retreat has become so extensive that he cannot any longer profit by contacts. The teacher is in the best position to recognize the withdrawn adolescent, his parents are too accustomed to his reactions to notice them, and in any case, they do not have daily experience with normal adolescents with whom to compare him.

The Paranoid Pattern The full-blown paranoid rarely appears in adolescence, it takes time and experience to develop the thoroughly distorted outlook on life that characterizes this form of deviation. However, the temperament from which it evolves appears at least by adolescence and often earlier. The tendencies are there and will build up into a most serious deviation if they are not somehow modified. The adolescent of this type is, above all, suspicious, unable to work with others, and strongly inclined to blame any failure upon circumstances or upon other people. One should not confuse these manifestations with the rebellious behavior of the adolescent who believes that all adults were invented just to be a nuisance to him. However, there are a number of indications that should help a teacher to distinguish mere normal rebelliousness from paranoid attitudes. The adolescent with a paranoid personality is likely to be rigid and inflexible, he often misinterprets the best-intended acts by his classmates or teachers, he resists directions—usually distorting them. He complains steadily of unfairness, he blames everyone else. He gets furious because another pupil has “stolen” his idea for a theme, he regards being given a slightly dirty look as a personal insult, he accuses the teacher of having favorites, and so on.

The teacher can often be of great help to the psychotherapist who is working with a young paranoid. It is worse than useless to chide him for blaming others or for otherwise defending himself; the teacher's words merely add one more threat to an already insecure ego. But sometimes a teacher can win such an adolescent's confidence, bit by bit, and is then in a position to help him make better contacts with his age-mates. It is worth while to take some pains with this type of deviate because the damage, if not at least halted, is likely to be severe.

Edward is a sixteen-year-old boy with a chronic grouch. He believes himself to be a promising young inventor, but somehow things go wrong with each of his inventions. He has already had correspondence half a dozen times with the Patent Office because his applications have been turned down. Actually, his inventions, while often excellent, are not new. On one occasion, for instance, he invented an egg-beater with a double set of bearings so that one rotation of the wheel would produce two rotations in the lower part of the instrument. The chief difficulty with this invention is that it has already been invented, although as an original effort of a sixteen-year-old boy it shows real promise.

Edward's schoolwork has been good in mechanics and average along other

lines Two years ago he had a series of infections in his ears, developed a mastoid, and was in bed for six months Upon the advice of his doctor, he remained out of school during the second semester, although by then he was able to be up and working at a bench he had built in the back of the garage This year of illness had a most unfortunate effect, aside from its undermining of his vitality He lost his former contacts with school friends, he had a disproportionate amount of time during which to work on his inventions, and when he returned to school he was a year behind those with whom he had been since his kindergarten days He now feels annoyed with the school because he is in classes with pupils he looks down upon as being too young for him, he is chronically annoyed with the Patent Office for refusing his applications, and he is constantly in hot water at home because of his increasing indifference toward school

About a month ago Edward left school and went to work in a garage He held his job only two weeks and was fired because he insisted upon trying to sell the customers various little gadgets he had invented He was surly when reprimanded and on several occasions refused to carry out orders. The boss mechanic reported him as having excellent mechanical ability and even admitted the value of some of Edward's inventions but stated that the boy could not tell a good gadget from a poor one Criticism, however, was taken in such bad humor that Edward rarely received any assistance from anyone else in estimating the value of his ideas Within a few days Edward got another job which he held less than a week, and from which he was discharged for very similar reasons He is now at home spending practically his full time puttering around and trying to work out an invention for which he has neither the equipment nor the scientific preparation, moreover, it has already been invented

Edward is definitely the paranoid type Everyone else is always wrong, everyone is jealous of him, everyone treats him unfairly He is always able to defend his side of a discussion with a mixture of arguments half true and half false He still does not see why the Patent Office refuses to give him patents and ascribes their behavior primarily to jealousy of his youth Nobody can tell Edward anything, and he is so completely isolated from his friends that there is no one in whom he has any real confidence

Table 27 is intended mainly as a summary of some of the problems in emotional deviation already discussed It is emphatically not a system of classification, nor is it by any means a comprehensive survey of emotional maladjustment It is intended only to indicate the problem areas around which the symptoms of certain deviations group themselves and to suggest some of the variations in severity among deviations No section of it is a rigid category, and both the degree of personality involvement and the areas of apparent conflict vary with individual cases Probably the only categorical statement that can be applied to emotional abnormality is that it is a complicated phenomenon Sometimes it happens that the same individual shows, simultaneously or successively, different expressions of his underlying problem For instance, in one school survey of 207 emotionally maladjusted boys and 72 similarly disturbed girls, the investigators found

Table 27

A BRIEF SUMMARY OF A FEW ADOLESCENT DEVIATIONS IN TERMS OF PROBLEM AREAS

<i>Typical Problem Areas</i>	<i>Problems of Adaptation</i>	<i>Persistent Behavior Problems</i>	<i>Severe, Enduring Problems</i>
I Psychological conflicts ^a A Traumatic episodes B Prolonged stress	Fearfulness, moodiness Fatigue	Anxiety episodes, depressions, phobias, compulsive behavior	Severe and early personality damage, may result in psychoses, schizophrenia, or paranoia
II Environmental conflicts and problems	Strain in managing environment around transient situational inadequacies	School and family maladjustments, neuroses	May lead to psychoses
III Culture conflicts	Anxieties regarding role and status, aggressiveness, feelings of social inferiority	Persistent delinquency, some sexual compulsions and conflicts	May precipitate already-present severe distortions of personality
IV Developmental deviations A Mental retardation B Mental acceleration C Physical retardation D Physical acceleration	Concern about status and interpersonal relationships Problems of peer relationships, social roles, sexual adjustments	If quite dull, tendency to neuroses More or less extreme reactions to physical differences	If very dull, considerable personality involvement Symbolic association with particular aspect of bodily loss or difference, real or imagined, may produce serious disturbances
V Disturbances of physical well-being A Acute illness B Permanent physical disability C Toxicities A Alcohol B Drugs D Psychosomatic illness	Transient delirium, fatigue Period of generalized distress in learning to accept handicap Acute episodes with quick recovery Sporadic attacks without adequate physical cause	Rarely results in neurosis Inadequate solution of handicap Addiction, without mental illness Chronic illness as expression of generalized emotional tension	Some diseases leave permanent changes in personality Severe disturbance of body-image, symbolically related to sexual roles Addiction with psychosis Hysterias, illnesses with specific symbolic meaning

^a Extends to some extent in all deviations

no less than 995 different symptoms of maladjustment. And not only do the same individuals show many different expressions and patterns of response, but the same response may be connected with any of a number of basic problems, just as, in the field of medicine, a high temperature may be associated with any of a number of diseased conditions¹⁹. In Table 27, the first column lists some of the areas of conflict in which emotional disturbances develop, the next three columns give, in a very general manner, some idea of the nature and severity of the maladjustments that may be associated with them.

Prevention of Emotional Deviation

Anyone who seriously contemplates the dimensions of the problem involved in a program of mental health is likely to be overwhelmed by its mere size. No one person can expect to do more than to peck at the edges, but if enough people contribute what they can, the problem will be solved, in spite of its proportions. Teachers are in an especially good position, because they are in daily contact with children and adolescents, to whom they are not attached by the kind of blind affection that prevents parents from seeing their offspring realistically. Efforts to date are already paying off in decreased admissions to mental hospitals. Thus, in one state, the admissions dropped in a few years from 467 per 100,000 inhabitants to 447. This change is not large enough to be dramatic, but it marks a beginning of a decrease that is likely to continue.

Especially to be noted is the increase in extramural care of patients—that is, care outside hospitals. This development is possible only because people are sensing the meaning of symptoms before these become acute and while the individual can be cared for through consultation and advice, without need to enter a hospital. The chart shown in Figure 103 tells the story. There would seem to be an increase in the actual number of patients in the hospital—as there actually is—but in proportion to the population of the state, the number has slightly declined. The marked increase is in the number of people who have sought aid through outpatient clinics. Naturally, people continue to have problems, but they are seeking aid sooner. On every side efforts are being made to investigate the problems of mental health, to educate the community in understanding its nature, and to marshal all forces against this great menace. In 1956 Congress enacted a Mental Health Study Act, providing for investigation of present knowledge and of present-day treatment of mental illness. In order to pool all resources and information, this newly created agency works through the medical

¹⁹ Research Committee of the California Association of School Psychologists and Psychiatrists, "Emotionally Disturbed Children in California," *California Journal of Educational Research*, 5 116-120, 1954.

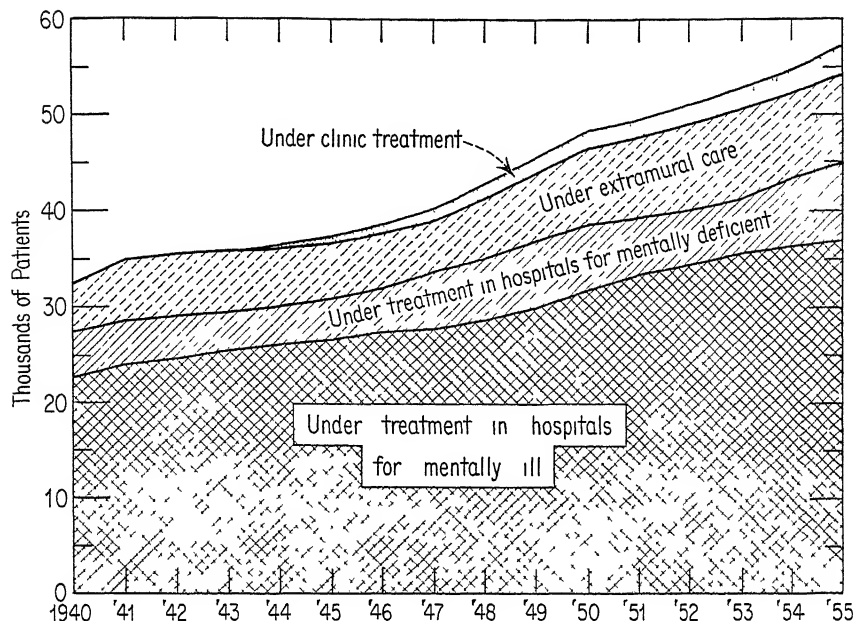


Fig 103 Patients under Care of One State Department of Mental Hygiene

Based on the *Report of the California State Department of Mental Hygiene, 1956*, p 9

associations and through state boards of mental health. There are now thirty-eight mental health societies and over 500 smaller groups that are devoting their time to educating the public, preventing mental disease, and rehabilitating those who have been in hospitals. Among their objectives are the following:

- 1 To mobilize authoritative information and to educate the layman, on the basis of known facts
- 2 To identify community conditions that are conducive to mental disorder.
- 3 To evoke and support any research that seems likely to be useful.²⁰

Aside from participating in the community effort toward the maintenance of mental health and keeping a classroom atmosphere that will lead to good adjustment, a teacher should report aberrant behavior whenever she notices it—and she *should* notice it—and she can co-operate in carrying out any suggestions made by the medical authorities concerning any pupil in her room. Thus, the teacher has her place in the task of improving the community's mental health.²¹

²⁰ G. S. Stevenson, *Mental Health Planning for Social Action*, McGraw-Hill Book Company, 1956, p. 340.

²¹ For an excellent article, see E. F. Eirwin, D. Dreisbach, and F. Graves, "Promoting Effective Relations between the School and the Child Guidance Clinic," *Mental Hygiene*, 41: 542-546, 1957.

Summary

A teacher should have some understanding of theories of personality, since these serve as a background for her use of personality tests. In the modern school, such tests are often used, therefore she needs to understand their nature and purpose. The teacher serves inevitably as a recognizer of abnormality, because she sees a large assortment of adolescents against the same background—namely, her classroom—and is therefore a better judge of their reactions than the parents, who see mostly their own children and then often do not see them clearly. In the course of their regular schoolwork, pupils show any abnormalities that they may possess. If the teacher is alert to the significance of what is before her, she can be extremely helpful in getting those pupils with emotional deviations under early treatment, thus giving them the best chances for recovery.

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PART FOUR

Social Development

16

Normal Social Growth

The adolescent years are, pre-eminently, a period of social development and adjustment. During the preceding years of childhood there has been, to be sure, a beginning of socialization, through the acquisition of fundamental social skills. The elementary school child can learn how to get along with others of his own age and sex in such social situations as arise during his schoolwork or his play outside school. He can also develop a workable relationship between himself and his parents or teachers. It is quite necessary that these childish adjustments take place, since they serve as a basis for the more complete development of the adolescent years. The social development of children is, however, limited both by their immature mentality and by their inattention to many social stimuli.

With the oncoming of adolescence, the boy or girl becomes acutely aware of social pressures and relationships. For a few years, in fact, these pressures become of overwhelming importance. The period is a somewhat trying one for parents, because they recede into the background and no longer can exert much influence. It is, of course, best that this development should take place, since an adolescent has to become independent of his home, but the process is sometimes a strain.

The next two chapters form a unit, with the topics assigned to one or the other in a perhaps arbitrary manner. This present chapter will deal with measurement of normal social growth, acceptance or rejection by one's peers, self-evaluation, prestige or status, and the nature of adolescent spontaneous social life. Assigned to the following chapter are the topics of the selection of friends, dating, and leadership.

Measurement of Social Behavior

In order to see the total picture and to develop a sense of what is and is not normal growth, it seems best to begin with consideration of such rating scales or other measuring instruments as will give a standard against which the behavior of a single individual or group of individuals may be

checked. Some measures are at least partially objective, and some are less so. One interesting formulation is in essence a statement of the social goals of the period. It states what the adolescent grows from and what he is to grow toward. Although the list of goals in Table 28 is not a rating scale, it can be used as a sort of check list for the evaluation of adolescent growth.

There have been numerous attempts to formulate rating scales for measuring socialization. Those that are based upon the impressions of the raters

Table 28 SOCIAL GROWTH

<i>Growth from</i>	<i>Toward</i>
1. Variety and instability of interests	1 Fewer and deeper interests
2 Talkative, noisy, daring with a great amount of any kind of activity	2 More dignified controlled masculine and feminine adult behavior
3 Seeking peer status with a high respect for peer standards	3 The reflecting of adult cultural patterns
4 A desire for identification with the herd, the crowd of boys and girls	4 Identification with small select group
5 Family status a relatively unimportant factor in influencing relations among peers	5 Family socioeconomic status an increasingly important factor in affecting with whom boys or girls associate
6 Informal social activities such as parties	6 Social activities becoming more formal, such as dances
7 Dating rare	7 Dates and "steadies" the usual thing
8 Emphasis on building relations with boys and girls	8 Increasing concern with preparation for own family life
9 Friendships more temporary	9 Friendships more lasting
10 Many friends	10 Fewer and deeper friendships
11 Willingness to accept activities providing opportunities for social relations	11 Individual satisfying activities in line with talent development, proposed vocation, academic interest or hobby
12 Little insight into own behavior or behavior of others	12 Increasing insight into human relations
13 The provision of reasonable rules important and stabilizing	13 Growing independence from adult and dependence on self for decisions and behavior
14 Ambivalence in accepting adult authority	14 Seeking relations with adults on an equality basis

as to some pupil's personal characteristics are relatively unsatisfactory, partly because the impressions are too general and partly because the opinions are too subjective. Ratings that are based upon descriptions of actual behavior are much better, probably because they are less subjective. Samples from one such scale appear below. The numbers from 1 to 7 are values to be assigned by the rater. The verbal descriptions tell what traits are being considered. A rating of 1 is the highest, 4 is average, and 7 is the lowest. Values of 2, 3, 5, or 6 are used to rate those who come between the extremes and the average.¹

1 ATTRACTIVENESS OF APPEARANCE

1	2	3	4	5	6	7
Extremely attractive and pleasing appearance, including clothing, features, proportions of body, carriage, cleanliness, facial expression, becoming clothes, proper distribution of fat		Pleasing and attractive in some of the factors listed in 1		Very unattractive, unattractive coloring and features, poor carriage, asymmetrical proportions, unpleasing expression, unkempt, ill-fitting, inappropriate clothes, excessively fat or thin		

3 ACTIVITY

1	2	3	4	5	6	7
Overtly active practically all the time, including gross movements and aggressive contacts with physical environment, eager, animated, bodily movements		Not conspicuous either because of activity or inactivity		Very little overt movement, stationary, indifferent attitude, idle, stolid, listless bodily movements		

4c INTEREST IN OPPOSITE SEX (*Without participation*)

1	2	3	4	5	6	7
Keenly alive to and curious about social-sex environment. Lacking the necessary techniques, persistently hangs around opposite sex and tries to initiate contacts		Hangs around members of opposite sex as an onlooker. Self-conscious and embarrassed in their presence or by their advances		Not only lacks techniques for mingling with, but has no interest in, members of opposite sex		

¹ F. B. Newman, "The Adolescent in Social Groups: Studies in the Observation of Personality," *Applied Psychology Monographs*, no. 9, 1946, 94 pp. Quoted by permission of the Institute of Child Welfare.

12 COMPLIANCE WITH AUTHORITY

1	2	3	4	5	6	7
Eager to comply with adults' wishes Anticipates what adults might want Asks adult assistance in enforcing regulations Extremely suggestible with adults		Takes rules and adult requests as a matter of course Resistance or compliance dependent upon the situation or the person in charge		Deliberately breaks rules Refuses to comply with requests of person in charge Subtly resists authority, evasive, sly, two-faced, smooth		

13 & 14 SOCIAL SELF-CONFIDENCE (*With same and opposite sex*)

1	2	3	4	5	6	7
Very assured social behavior with both adults and children Takes failure in matter-of-fact way Invites new situations requiring poise and confidence		Is assured with friends and in accustomed situations Capable of adjusting to new situations requiring poise and confidence.		Panicky in social situations Makes excuses for self Shrinks from making new adjustments		

27 & 28 SENSITIVITY, DEPENDENCE ON APPROVAL (*With same and opposite sex*)

1	2	3	4	5	6	7
Explosively concerned about the sort of impression he makes on his associates Very sensitive and easily "hurt" Reacts strongly to praise or blame Constantly leaning on others for approval of his actions, or help in his decisions		Moderately concerned about the impression he makes on his associates Fairly stable and self-reliant in his relationships with others Emotional give-and-take Not oversolicitous for approval in most situations		Unconcerned about the impression he makes on his associates Insensitive and indifferent to the opinions of him held by others Arrives at and acts upon his own decisions Does not depend upon social approval		

30 GROUP (VS SELF-) INTEREST

1	2	3	4	5	6	7
Quickly adapts himself and buoyantly carries the load or enthusiasms for group interest and activities, or quickly adapts and devotes himself unreservedly to the interests of the group Enthusiastically encourages activities in which most of the group are interested		Assumes the attitude of the majority of the group and does what they seem to expect		Persists in putting personal preferences before the group interests Makes an issue of little things Tries to force others into his pattern of interests May even blow up with an emotional reaction whenever he can't have his way		

In order to demonstrate the use of such scales, one of the writers has rated a young acquaintance whom she has known for several years and has had adequate chances to observe. The entire scale has been used. The ratings appear in Figure 104. This girl shows a number of problems, which are made clear by the profile that emerged from the ratings. She is under-active in all fields. Her appearance, aside from her being too quiet, is good,

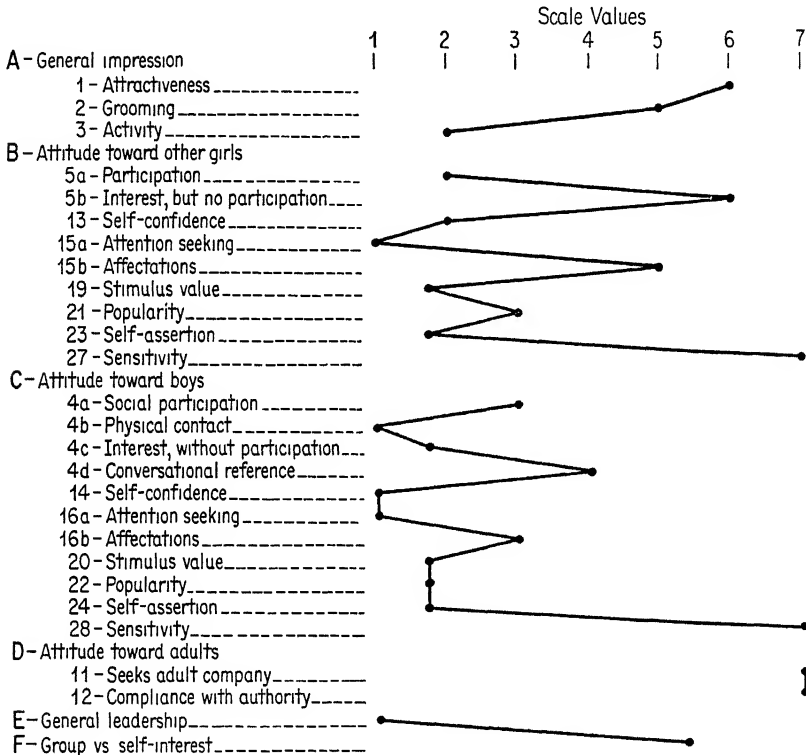


Fig 104 One Girl's Ratings on a Rating Scale

she is rated as very attractive and well groomed. Her relations with other girls seem to be amiable enough, but she does not take much part in activities, although she is a very much interested observer. She is considered to have a number of affectations, but since she is at the same time rated low on attention seeking, these mannerisms may well be primarily defense reactions. She received the highest possible rating in sensitivity. In her relations with other girls, then, she is sensitive to what goes on, she watches with interest, but she takes little part in their activities and avoids attracting attention. Her adjustment is not good, but it has elements through which it might rather easily be improved. Her relations with boys are, however, very poor indeed. She avoids them and is embarrassed by any attention from

them. On the other hand, her appearance leads boys to notice her and talk about her. In this field also she shows great sensitivity, but her insights and appreciations are not implemented by appropriate action. She shrinks from physical contact, and she does not even show much interest of any kind in boys. Since this girl was fifteen at the time of her rating, she should have had such an interest, and she should have made at least casual contacts with boys in her classes. Her adjustment to adults is excellent. Presumably she prefers their company to that of her age-mates of either sex. She has no gifts of leadership, but she does show an interest in group activities.

This girl is shy, retiring, uncertain of herself and of her status among her companions. She lacks any self-assertiveness, and she has already developed mannerisms—usually a visible sign of underlying difficulty. She seeks to attract as little attention as possible, except when she feels safe among adults, and with them she is compliant rather than independent. One gets a picture of a “good” child in an adolescent body. This girl needs encouragement badly, but she is already too withdrawn from life to profit by being thrown into activities for which she has no skill. Her teachers might assign her to work in a very small group with two or three girls and boys on some simple task to which she could contribute. The essential problem is to re-educate her without so frightening her that she will lose what little contact she now has through her spontaneous observation of what others are doing.

Perhaps a word should be said about the concept of social age, a measurement parallel to that of mental or emotional age, which could be derived from the use of such scales as that presented above. Pupils show an infantile social age if they are noisy, if they get their materials into a mess and then walk off and leave them, if they grab what they want, if they are destructive, if their humor runs to slapstick, if they have little perception of their own relation to their peers, or if they resent adult guidance. Abject conformity and clique or gang loyalty represent a somewhat higher social age. A socially mature person is characterized by his awareness of his own role in his group, by his desire to keep the peace, by his sense of fair play, by his honest, considerate treatment of others, by his use of general principles in guiding his conduct, and by his customary conformity to the mores, which is, however, linked with a willingness to be a nonconformist if necessary when the mores run counter to his convictions. In the course of time it is probable that measurements of social age will be in as common use as those of mental maturity.

Spontaneous Social Life among Adolescents

The unit of social life during adolescence is a small clique that is usually referred to as “the crowd.” It is typically composed of an equal number of boys and girls. The core of it contains six to eight members,

with perhaps another half-dozen adolescents around the fringes. Those who are steady members customarily live within three or four blocks of each other, attend the same school, and come from roughly the same socioeconomic background.

The activities of the crowd vary somewhat from one season of the year to another, but at almost any season they include listening to the radio, watching TV, occasionally going to a movie, eating, dancing together at the home of some member, and listening to phonograph records. In the summer they go on picnics together, or they sit on someone's porch and talk—with at least one trip each evening to the neighborhood drugstore—or they go swimming, and so on. In the winter the group sits around in the home of a member, watches TV, and raids the icebox from time to time. None of this comes under the heading of adventure as seen through the eyes of late childhood, but it is apparently exciting to the adolescent. It is adventure, not into the world of things but into the world of social relationships. An adult listening to the conversation of such a crowd for an evening can hardly see that the chatter has been worth while. It does not seem to start anywhere, to go anywhere, or to be about anything. It is, however, satisfactory to the participants. It obviously gives them an opportunity to develop their conversational powers on other people whose abilities are no better than their own. Other values obtained from such a crowd include experiences in getting along with other people, practice in social skills, development of loyalty to a group, practice in judging people, assistance in the emancipation-from-home procedure, and experience in love-making under circumstances in which the participants are protected from serious consequences. Moreover, the group gives its members a feeling of social security, of "belonging."

The "peer culture," the sum total of spontaneous social manifestations among age-mates, is most clearly defined and most influential during the middle years of adolescence. At this time adult values have less power to produce behavior than peer values. That is, if "everyone" is wearing berets, it is almost impossible to persuade an adolescent to wear any other sort of headgear, no matter how formal the occasion or how inappropriate the beret, if "no one" is wearing berets, then an adolescent will not wear one even to keep the hair out of his eyes while he is sailing a boat. Apparently, one of the deepest of adolescent needs is the need to be supported and approved by his peers. Deviations of any sort from the mode of the group are painful. An adolescent cannot afford to risk the ridicule of his intimate friends because he is too dependent upon them for approval. A teacher should always keep in mind this dependence of adolescents upon their age-mates. She has to work with it, because she will certainly be unsuccessful if she tries to work against it. As the years pass, the values of the crowd gradually mature and approach the adult norm for their social group. Also,

the crowd tends to disintegrate under the pressures of later adolescence and early maturity. But while it endures, it is the most formative influence in the life of the average boy or girl.

On the debit side, it is probable that the crowd encourages some degree of snobbery and that it has an undesirable effect upon those who belong to no crowd at all. Sometimes an intense rivalry springs up between two crowds and leads to extremely silly behavior and occasional outbreaks of violence in some communities under economic or social stress, but such situations do not usually last long. If some observant and tactful older person can bring about an attachment to an existing crowd for the isolates or can influence the growth of a new crowd among those who belong to none, and can manage to curb the occasional excesses of loyalty, this spontaneous social group could become even more valuable than it is naturally. Even as it is, the crowd probably does more to bring about normal social growth than teachers and parents combined.

The clique, the fraternity, and the sorority are less healthy manifestations at the secondary school level. Adolescents go to enough extremes in social adulation and social ostracism even at best, without the encouragement of group support. The clique, of whatever character, is too tight an organization for a member's own good, it is by nature intolerant, it is usually based upon either wealth or social class, and it demands a loyalty from its members that prevents many possible social contacts from taking place and reduces the effectiveness of those that do occur. A clique is really a caricature of a crowd, an out-of-proportion drawing with the least desirable traits overemphasized. Cliques are unhealthy both emotionally and socially, and they precipitate unhealthy reactions among the outsiders as well as among the members. The excerpt below was reported by an obviously rejected adolescent.

Frankly, for a lot of us there is nothing here, but just going to classes, listening to the teacher, reciting, studying, and going home again. We are pushed out of things. There is a group of girls here who think they are higher than us. They look down on us. I won't mention any names, but they are a group of girls from the higher families. They have a club that is supposed to be outside of school, but it's really in the school. They just go from one club to the other and hog all the offices. They're in all the activities. They talk about what they're doing, what they're going to do, and they won't pay any attention to us. They snub us and they won't talk to us. Some of them will speak sometimes, but most of the time they just ignore us. I'd like to be in the school activities and the school plays, go to the dances, and things like that, but they make us feel like we're not wanted. If we go to the high school dances, nobody will dance with us. They dance among themselves and have a good time and we're nobody.²

² Reprinted with permission from August B. Hollingshead, *Elmtown's Youth*, pp. 202-203, 343, copyright 1949, John Wiley & Sons, Inc.

To an adult, the social behavior of boys and girls when they are left to themselves often seems silly, awkward, or merely wasteful of time that might well be used otherwise. It is true that adolescent social skills are undeveloped and awkward, but for that very reason boys and girls need precisely the kind of experiences they crave, in order that they may acquire poise and adjust themselves to the demands of society. The adult, whether teacher or parent, has a definite role in relation to the spontaneous social life of adolescence. The main thing is that the adult should remain not far away and available when wanted but should not interfere when not wanted, or make attempts at guidance that can be detected for what they are. Attempts to mingle with the group as if one were of the same generation are not only futile and ridiculous but are practically certain to alienate the adolescents. Any obvious effort at control has the same effect. It is one of the minor mysteries of life that some fine, educated, well-intentioned men and women are quite incapable of providing acceptable supervision, while certain quite ordinary, uneducated, only moderately interested adults do so admirably. One of the writers remembers one family from her own adolescent days in which the mother was unable to make any but the most distant contacts with the cronies of her adolescent daughter, whereas the Irish cook was perfect in the role of "teacher, philosopher, and friend." The mother greeted her daughter's guests courteously and pleasantly, but then retired to the second floor. The cook stayed in her kitchen, except when she was bringing food to the guests, but almost every boy and girl in the group went to her once or twice every evening with problems, great or small, and was given hardheaded advice. She never intruded, but she was available when wanted, and her mere presence not only prevented misbehavior, but spread a feeling of complete security.

Social Acceptance and Rejection

Study of the traits which make an adolescent popular or unpopular has indicated that both acceptance and rejection of an individual by a group are complex phenomena. The commonest method of investigation has been to have each student in a class select from his schoolmates the one or two whom he most admires, most prefers to work with, likes best to play with, would choose as an intimate friend, would want for a class or club president, and the like. The students also list the names of those whom they dislike. In addition, the teachers may submit what evidence they have as to who is accepted and who is not. The popular students are those who are mentioned by the largest number of classmates as first or second choice in the largest number of situations, are not listed as being disliked, are considered by their teachers as being easy to find partners for in any group undertaking, are noticed by their teachers as being continually with others and

often in the center of a group, and have a record of having been actually elected by their classmates to sundry positions of honor. The unpopular students are those who are never or almost never mentioned as admired or liked in any situation but are often listed as disliked, are avoided by others and rejected if they make advances, are difficult to find partners for in group undertakings, and are regularly the last ones to be chosen for team games on the playground.

The first study was based upon results from 665 college girls who named which girls of the group they regarded as best friends and which they disliked.³ The total number of positive choices was 1,860, or 2.8 per girl, for negative choices, or rejections, the total was 682, or 1.02 per girl. By assigning positive numerical values to first, second, or third position of choice on another girl's blank and negative values for first, second, or third position of rejection on another's blank, and then subtracting the negative from the positive, the investigator obtained "prestige status scores" which varied from the least popular girl at -76 to the most popular at +607. Of the 665 girls, 200 rejected no one. It will be noted that liking was commoner than disliking, acceptances exceeded rejections by a rate of 3 to 1. This reflection upon human nature should be a comforting thought.

The second investigator studied the interpersonal relations among 400 girls in a reform school.⁴ The technique was much the same as that just described. There were 1,045 choices, or 2.6 per person, and 587 rejections, 1.4 per girl. These figures agree well enough with those from the first study. The investigator next identified those girls who were conspicuously "overselected," that is, the 21 girls who were most popular, also, those who were conspicuously "underchosen," the 22 who were least popular. As a group, the unpopular tended to claim a disproportionate number of the most popular as their friends and to ignore each other, neither choosing nor rejecting. The popular girls tended to choose each other and to assign such rejections as they made to the most unpopular members of the group, often rejecting the very girls who had chosen them.

In addition to the selections by the girls, the investigator obtained ratings on each from the various housemothers in the school. In evaluating these judgments, one has to remember that the girls were in a reform school, and the housemothers were probably influenced unduly by the amount of trouble each girl caused her. The unpopular girls were mainly of the aggressive, "chip-on-the-shoulder" type. Conspicuously missing are the girls who are withdrawn, shy, inactive, repressed, negative, and unsocial, presumably because they do not indulge in enough overt behavior of any

³ C. Smucker, "Management of Group Tension through the Use of Negative Sociometric Data," *Sociometry*, 10 376-385, 1947.

⁴ H. H. Jennings, *Leadership and Isolation: A Study of Personality in Interpersonal Relationships*, Longmans, Green & Co., 2d ed., 1950, 349 pp.

kind ever to be put into a reform school. The popular girls, however, showed two constellations of traits: one type is friendly, placid, motherly, and reasonably dependable, the other is more dynamic, has many qualities of active leadership, but does get into trouble with the rules and regulations and shows certain basic antagonisms toward others that leaders of her type do not usually show.

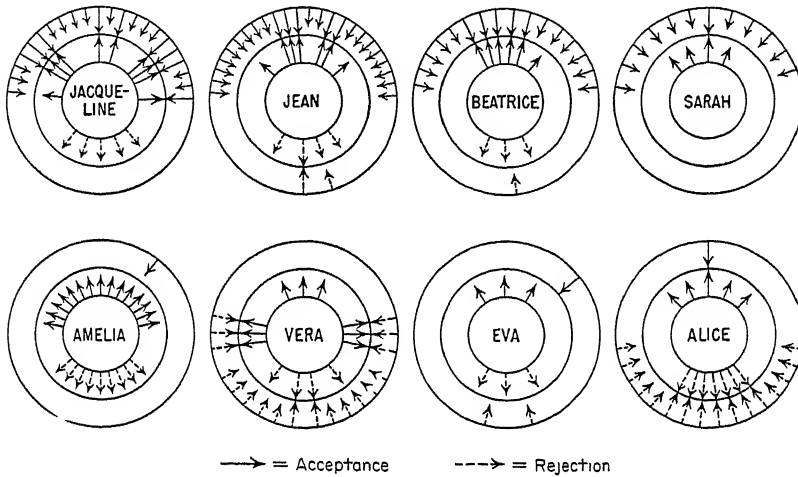


Fig 105 *Popular and Unpopular Girls*

From H. H. Jennings, *Leadership and Isolation*, Longmans, Green & Co., 1950, pp. 105-111. Used by permission of the publisher.

The behavior and attitudes of individual girls were recorded both by diagrams and by case studies. The diagrams show the number of choices and rejections made by each girl, plus the choices and rejections expressed toward her by others. In Figure 105 there are eight diagrams. Jean and Jacqueline were among the most popular girls in the reform school, Beatrice and Sarah were also popular, but less so. Vera, Alice, Eva, and Amelia were all extremely unpopular. Vera was a complete isolate, she received no votes at all. The other three were near isolates, each being chosen once. The diagrams are constructed in the following manner: in the smallest circle is the girl's name, in the next larger is a record of her choices and rejections—the former shown by arrows with unbroken lines in the upper half of the diagram and the latter by arrows with broken lines in the lower half, the outside ring records the reactions of other girls toward the one whose name appears in the middle area. When the heads of two unbroken arrows, one from the outer and one from the middle circle meet, the liking between the two girls involved was mutual, when the heads of two broken

arrows meet, the girls disliked each other, when the heads of an unbroken and a broken arrow meet, the first girl liked the other while the second rejected the first—or vice versa.

Jacqueline is the most outgoing and sociable of the popular girls. She made relatively many choices—ten. Of the ten she chose, all but one chose her. She was chosen also by another thirteen girls whom she had not selected as friends. She rejected five girls, but was not herself rejected by anyone. Jean made fewer choices (seven), of which five were mutual, nineteen other girls also chose her. Jean rejected four girls, one of whom rejected her. One other girl also disliked her. The picture is not quite as good as that for Jacqueline, but nevertheless shows a girl who is highly popular, even if she does arouse occasional fiction. Beatrice's diagram shows five mutual choices, one unreciprocated choice on her part, and eleven additional choices directed toward her. She rejected three girls and was rejected by one. Sarah is near the lower limit of the twenty-one overchosen girls. She made one mutual choice, and three additional ones, eleven other girls liked her. She neither has nor arouses dislikes. Her own selections are remarkably few. Her acceptance seems to consist largely in being unobjectionable rather than in being truly popular. Eva has little emotional reaction toward others. She has established no mutual contacts either positive or negative with anyone. Two girls disliked her and one liked her, but perhaps without her knowing it. Amelia, equally isolated, although less actively disliked, does not share Eva's resignation to the indifference of others. She made fifteen positive choices and nine rejections, but got only one vote in return. She is emotionally active but seems unable to establish even enough contact with others to be disliked. Alice and Vera are of a different type altogether. Alice expressed a liking for five girls, one of whom liked her. She thus does have *one* friend. On the debit side, she was involved in seven mutual antagonisms and was disliked by an additional nine girls, toward whom she is neutral. Alice gives evidence of being a fighter who meets hate with hate. Vera shows a pathetic attempt to make contacts, which lead her into rejection. Of her nine choices, six disliked her. She rejected four girls, and was rejected by two of them, plus ten others, not counting the six already mentioned. No one voted for her. Unlike Alice, she has no friend to fall back on, and she has a positive genius for persuading people to dislike her.

The popular girls showed various constellations of such traits as good looks, vitality, intelligence, sympathy, quick insights, enjoyment of life, outgoing manner, high verbal ability, appreciation of others, generosity, tact, and lack of nervous mannerisms and habits. One was appealing mainly because she was young, full of energy, vivacious, and friendly, another, because she was understanding and tactful, and so on. The unpopular girls sometimes had the ingredients of good looks, but they did not make use of them. They were unsure of themselves or else they overcompensated for a fundamental unsureness by pestering others. Some were self-conscious, shy, and withdrawn, others had objectionable mannerisms, some seemed to be pale nonentities. As a group, they did not know how to

make normal contacts with others, and they were markedly self-centered. One or two had developed compensatory mechanisms by trying to buy friendship in return for services. Inevitably, they were dejected and unhappy

Traits Admired or Disliked The list of traits to be presented in Table 29 was derived from a number of sources. In some cases a trait that contributed to unpopularity is merely the reverse of one that is admired, but this contrast does not always appear.

According to this list, appearance and manner are often of great importance in determining social acceptance. An attractive face, a trim figure, a pleasant manner, a fluency in small talk, a stylish hair-do, and clothes prescribed by the fad of the moment are elements of attractiveness. Homeliness, dirtiness, excessive fatness or thinness, excessive perspiration, out-of-date or shabby clothes, hesitancy in speech, crudeness in manner or any real variation from the group norm are sources of unpopularity. Those girls who rate lowest in appearance are found to be negative, withdrawn, self-effacing, and not interested in people or events. Rejected by their age-mates, they have evidently stopped trying to maintain social contacts. An unpopular girl could presumably improve her status by remedying her defects of appearance, indeed, this is precisely the path that unpopular girls of financially adequate families follow, often with success.

There are some changes from early to late adolescence in the traits that are admired, although the chief difference lies in emphasis rather than in the selection of characteristics. In one group of adolescents,⁵ cheerfulness, enthusiasm, and friendliness were rated high at all ages, being good-looking was less important at eighteen than at thirteen, but ability to initiate activities was more important. At both thirteen and eighteen, pupils disliked those who wanted to fight, who sought attention, who were bossy, restless, or talkative, or who tried to act older than they were. There was little difference between boys and girls in the traits selected for approval or disapproval.

Analysis by means of tests, questionnaires, ratings, and interviews has revealed two trait syndromes that characterize the popular pupil⁶ and three that characterize the unpopular.⁷ Some greatly admired individuals have a high degree of social aggressiveness, that is, they are expansive, talkative, daring, energetic, and enthusiastic. Others who are equally popular have no dash or verve whatever and have achieved their acceptance through being friendly, kind, sympathetic, good-natured, and happy. They are also more emotionally and socially mature than their friends. Individ-

⁵ R. G. Kuhlen and B. J. Lee, "Personality Characteristics and Social Acceptability in Adolescence," *Journal of Educational Psychology*, 34 321-340, 1943.

⁶ M. E. Bonney, "Personality Traits of Socially Successful and Socially Unsuccessful Children," *Journal of Educational Psychology*, 34 449-472, 1943.

⁷ M. L. Northway, "Outsiders," *Sociometry*, 7 10-25, 1944.

Table 29 LIST OF TRAITS

<i>Liked</i>	<i>Disliked</i>
A <i>Appearance and manner</i>	A <i>Appearance and manner</i>
1 Has good looks	1 Is unattractive
2 Is neat and clean	2 Has physical handicap
3 Wears appropriate clothes	3 Dresses inappropriately
4 Is natural	4 Is dirty
5 Is well-mannered	5 Uses too much lipstick (girls)
	6 Uses hair grease (boys)
B <i>Leadership type of popularity</i>	B <i>Withdrawal behavior</i>
6 Makes many contacts	7 Is listless
7 Is active, energetic	8 Is too much absorbed in self
8 Is enthusiastic	9 Is too bookish
9 Is a good talker	10 Is too prissy, too "good"
10 Pursues many activities	11 Is timid, shy, embarrassed
11 Shows initiative	12 Is overdependent on others
12 Is usually good in athletics	13 Is poor in athletics
	14 Has no interest in activities
	15 Is "queer"
	16 Has inadequate social skills
C <i>Social type of popularity</i>	C <i>Retaliatory, attention-seeking, or paranoid behavior</i>
13 Is kind	17 Is resentful, carries a grudge
14 Is co-operative	18 Is quarrelsome
15 Is unselfish	19 Is a bully
16 Is usually cheerful	20 Is rude and bad-mannered
17 Is even-tempered	21 Shows off, brags
18 Is friendly	22 Is stuck-up, snobbish
19 Is sympathetic	23 Interferes with others
20 Is responsible	24 Is domineering
21 Is loyal	25 Thinks he is picked on
22 Is truthful	26 Is constantly making alibis
23. Has high ideals	27 Is stubborn
24 Has good sense of humor	28 Is untruthful
25 Has maturity	29 Is disloyal
26 Is a good listener	30 Is moody
27 Has adequate social skills	
D. <i>Miscellaneous</i>	D <i>Miscellaneous</i>
28 Is intelligent	31 Is stupid
29 Gets good marks	32 Is immature
30 Has good reputation	33 Is nervous
31 Is a good sport	34 Is a poor sport
32. Has a good home	35 Is lazy

Based upon the following references A Anastasi and S Miller, "Adolescent Prestige Factors in Relation to Scholastic and Socioeconomic Variables," *Journal of Social Psychology*, 29 43-50, 1949, M E Bonney, R E Hoblit, and A H Dreyer, "A Study of Some Factors Related to Sociometric Status in a Men's Dormitory," *Sociometry*, 16 287-301, 1953, H S Bretsch, "Social Skills and Activities of Socially Accepted and Unaccepted Adolescents," *Journal of Educational Psychology*, 43 449-458, 1952, M L Northway, "Outsiders," *Sociometry*, 7 10-25, 1944, A Schoepper, "Sex Differences in Adolescent Socialization," *Journal of Social Psychology*, 38 175-185, 1953

uals of this second type are not so much admired as loved. The first group of "outsiders" includes those maladjusted youngsters who are aggressive, noisy, rebellious, boastful, overtalkative, and selfish. These children are actively disliked by their age-mates. The second type includes those who are not interested in social life and are therefore immature in social skills, shy, easily embarrassed, passive, and quiet when in a group. The boy or girl who loves to study may sometimes belong in this last category, so also does the radio enthusiast or the eager young philatelist who pores over his stamp collection instead of going to football games and cheering for the team. This second type of unpopular pupil is the isolate whom no one mentions at all. He does not repel people, he merely fails to get their attention. The third type includes those pupils who are introverted, listless, under par physically, and withdrawn emotionally. The normal youngsters disregard such human oddities, label them as "queer," relegate them to social limbo, and forget them.

Among young girls, at least, the commonest response to rejection is to withdraw from social situations altogether. Such girls tend to become self-conscious, to refuse to recite in class, to avoid meeting new people, to stand in the back of an audience rather than take a vacant front seat, and to avoid drawing attention, even of a favorable nature, to themselves.⁸ Boys often make overcompensatory reactions, push themselves forward into groups where they are not wanted, recite too often, indulge in noisy speech and general rowdiness. Of the two responses, the second is the more healthy, but it certainly presents problems to the teacher.

The Effect of Social Class upon Friendship Selection and Social Prestige As teachers have known for a good many years, pupils from the same socioeconomic level tended to form more or less exclusive groups, which sometimes have a disruptive influence upon the social life of the school. One quite recent study of all the sixteen-year-old adolescents in a small city makes clear the pervasiveness of social class in the activities and attitudes of the pupils.⁹ As a first step, all the families that had sixteen-year-old children were grouped into five socioeconomic classes, upon the basis of several types of evidence. The investigators then administered tests of various kinds, interviewed the adolescents, collected their opinions, and studied their social interrelations. The relation of the data on social class to the activities and attitudes of the pupils in the high school is of special interest because it demonstrates how social stratification, even in a democracy, can produce marked inequalities of many types. A few outstanding examples are shown in Figure 106. Since there were relatively few pupils in the two upper classes, they have been put together.

As one might expect, intelligence showed a rough relation to class. No

⁸ A. A. Rose, "Insecurity Feelings in Adolescent Girls," *Nervous Child*, 4:46-59, 1944.

⁹ Hollingshead, *op cit*.

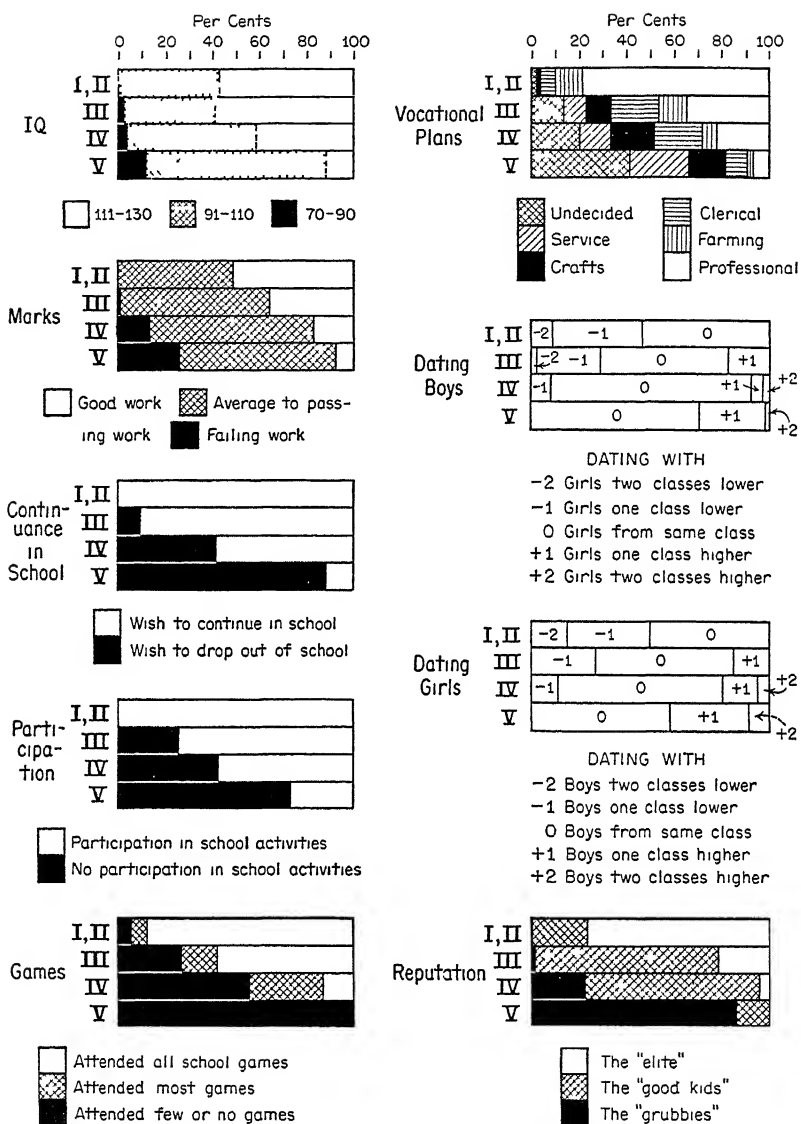


Fig 106. *Influence of Social Class upon Attitudes and Activities*

Based on figures in A B Hollingshead, *Elmtown's Youth*, John Wiley & Sons, 1949, pp 172-216

pupil in Classes I and II had an IQ below 90. The bulk of the lowest IQ's was found in Class V. It should be noted, however, that there were also some high IQ's in the lowest class. Marks showed an even higher relationship to social class than intelligence did. Half the pupils in Classes I and II

were doing good work, and no one was failing, in Class V, nearly a third were failing and less than a tenth were doing good work. Every pupil in Classes I and II wanted to continue in school, and everyone took some part in extracurricular activities. Almost 90 per cent of the Class V pupils wanted to leave school at once, and only 25 per cent of them participated in activities. Those from Classes II and III occupied a position between the two extremes in almost every trait or measurement. The data on attendance at football games are particularly revealing. Ninety per cent from Classes I and II and 65 per cent from Class III attended all or almost all the games. Evidently they felt the team was "their" team and the school was "their" school. Pupils from Class V and over half of those in Class IV attended few if any games, thus giving indisputable evidence that they did not feel themselves bound to the school by emotional ties. The data on vocational plans followed the lines one might expect, in view of the home backgrounds from which the pupils came. Both boys and girls had from a half to two thirds of their dates with members of their own social class, although it is improbable that they made their selections with social standing in mind. In no instance was there any dating between the members of the highest and the lowest classes. In the particular high school under consideration the students attached "labels" to each other, thus expressing their spontaneous attitudes. The three labels in current usage were the "elite," the "good kids," and the "grubbies." The members of the first two groups were socially accepted, the difference being that the elite set the tone and furnished the leadership. The grubbies were rejected. No one in Class I or II was characterized as a grubby, and only 1 per cent of those in Class III were so labeled. The per cent increased to 20 in Class IV and burgeoned to 85 for the lowest social group, from which there was no contribution to the ranks of the elite.

In the above sample, the boys and girls who had dates with adolescents one or two classes above their own, those from the lower groups who did well in school and participated in its activities, and those who were planning to enter the professions were all trying, by various routes, to improve their status. Some of them will succeed, and their children will start upon a higher rung of the social ladder than that originally occupied by their parents. At the other end, the small number of births in Classes I and II families leads to a constant shrinking of their proportional representation. Some of these families die out, some deteriorate, and some meet financial reverses, their places are then taken by families from Classes III and IV who have prospered financially and now function as social arbiters in the community. These processes go on all the time, and their effects are reflected in the attitudes of high school pupils toward each other. Probably the high school involved in this study should initiate measures to make school more attractive to boys and girls from Classes IV and V and to help them make

themselves more attractive to other students. One trouble may be that prestige in different social groups rests upon different characteristics.¹⁰ Thus, members of a lower class tend to value self-assertion and aggressiveness, presumably because these are the traits which might lead one upward in the world and also because, in any case, they represent a protest against being considered "lower." Members of an upper class among adolescents usually tend to conform to adult standards and therefore resent the aggressiveness. Sometimes a joint undertaking in the school leads to a greater understanding on both sides, with resulting better adjustment. In the study just reported, the degree of exclusion and rejection seems somewhat higher than it needs to be. One has to remember, however, that differences in ability and achievement will continue to exist and will inevitably lead to differences in the attitudes of pupils toward each other.

Summary

Adolescents are tremendously sensitive to social stimuli, no other problem seems to them as important as the establishment of themselves in their own society. They react faster and more deeply to the influence of their age-mates than to that of adults. High school boys and girls tend to form small, shut-in cliques, the members of which are intensely loyal to each other and highly critical of outsiders. Degrees of popularity among students vary from those who are desired as "best friend" by a large proportion of their classmates to those who are rejected or ignored. The traits that are admired by adolescents are known, and the combinations most likely to lead to either acceptance or rejection can be recognized. It is possible to measure with some accuracy the social adjustment of a student and to see in which phases of his life his adjustment is adequate or inadequate. In the course of time it is probable that social age, as a definite measurement, will take its place with intellectual and emotional age as an indication of maturity.

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¹⁰ B. Pope, "Socio-economic Contrasts in Children's Peer Culture Prestige Values," *General Psychology Monographs*, 48:157-220, 1953.

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17

Friendship, Dating, and Leadership

The present chapter is really a continuation of the one just preceding. Both deal with basic points in the interpersonal relationships among adolescents. This chapter will summarize the available data about the selection of friends, the selection of "dates," and the selection of leaders. There is a formidable mountain of material on these topics, far more than could be discussed in a short chapter. The authors have therefore tried to select representative studies that demonstrate modern thinking on these matters.

Selection of Friends

Adolescent boys and girls are most eager to have friends of both sexes and are inclined to measure their social status in terms of their ability to establish friendships with their peers. In recent decades there has been a good deal of research into the age-old problem of who will choose whom, and why. The matter is far from settled, but at least a few points have become clear.

Bases of Friendship The usual study of this type proceeds as follows. The investigator asks each of a group of adolescents to list the people whom he would choose as friends—or, perhaps, merely to list his friends—and often also those whom he would not choose. The investigator next gives a variety of tests to all members of the group, inquires into their standing among their peers, and finds out all he can about each individual concerned—especially such things as may reflect personality. He then tries to relate the various traits of each pair or group of friends, in an effort to find out why they appealed to each other. Sometimes there are such refinements as asking the adolescents to choose a companion for a specific purpose—as a roommate, a companion for a day's excursion, or a person to study with, and so on. It is at once clear that friendship choices vary somewhat from one activity to another, especially if any need for leadership is involved.

The greatest single reason for selecting an individual as a friend is neither dramatic nor psychologically revealing, it is mere propinquity.

Obviously the environment limits the number of possible associates, but it does not force boys and girls to choose as best friends those who live in the same block or in the same dormitory or are in the same classes in school. Yet in all studies, the factor of propinquity emerges as of utmost importance.¹ Thus, college girls who were asked to name what three girls they would most want to keep in touch with after college chose over 50 per cent from their own dormitories.² The next most important basis was membership in the same college class, the 103 freshmen cast 74 per cent of their votes for other freshmen, the sophomores, 60 per cent for other sophomores, the juniors and seniors, 50 per cent for their own classmates. A third and much less important basis was concentration in the same major subject, but one does not know how much of this result was again due to propinquity, since majors meet each other more often than they meet other classmates and with increasing frequency as they advance through college. Two other studies of similar character showed that college men tended to choose friends not only from the same dormitory, but even from the same floor.³ More often than not girls choose girls as their "best" friends, and boys choose boys, in both high school and college.

One of the writers is reminded by the above statements of her own experiences in a college dormitory. There were twenty freshman girls in this particular building, the number remains in memory because there were just enough to fill two tables of ten each in the dining room. Of the subsequent history, the following facts can be given. In their senior year six of the twenty occupied a suite of rooms, four pairs were roommates, one had joined a group of girls from another dormitory who came either from her preparatory school or her home town, or both, three of the twenty lived together in a double room and immediately adjoining single, of the remaining two, one was too nervous to live with anyone, and the other was extremely unpopular. Since graduation most of these friendships have continued, insofar as is possible when all twenty are married and have families. In this instance, these twenty girls not only lived in the same dormitory, they sat at the same tables three times a day, attended many of the same classes—since most freshman subjects were required—and played on the same teams, so that the propinquity begun in the dormitory was reinforced by other experiences.

¹ R. F. Winch, "The Relation between the Loss of Parents and Progress in Courtship," *Journal of Social Psychology*, 29 51-56, 1949.

² R. F. Winch, "Interrelationship between Certain Social Background and Parent-Son Factors in the Study of Courtship among College Men," *American Sociological Review*, 11 333-343, 1946, and "The Relation between the Loss of Parents and Progress in Courtship," *loc cit*.

³ B. Willerman and L. Swanson, "Ecological Determinants of Different Amounts of Sociometric Choices within College Dormitories," *Sociometry*, 15 326-329, 1952, M. E. Bonney, R. E. Hoblit, and A. H. Dreyer, "A Study of Some Factors Related to Sociometric Status in a Men's Dormitory," *Sociometry*, 16 287-301, 1953.

Social status is another factor in the selection of friends. Naturally, not many adolescents select another merely because he or she belongs to a certain level of society, but when one studies pairs of best friends, one finds that both members are more likely than not to come from the same socio-economic background

One excellent study concerned both choices and rejections among school children in the tenth and eleventh grades of high school in a small mid-

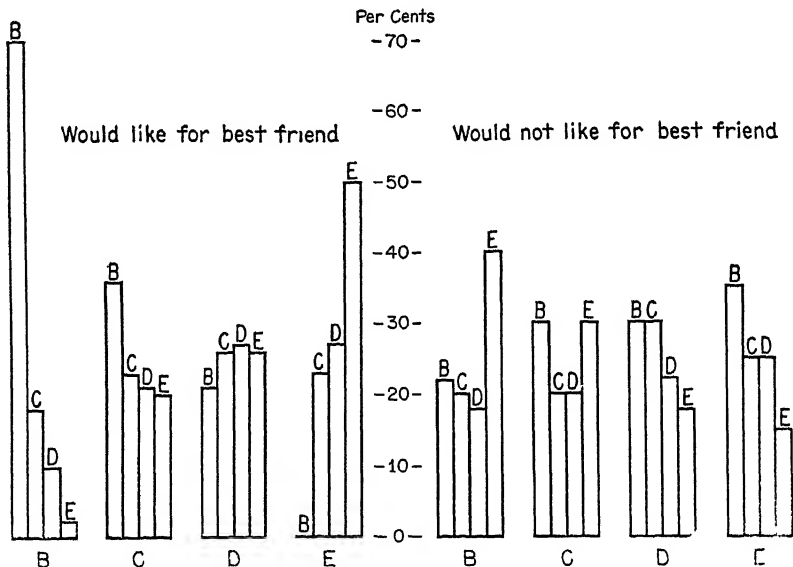


Fig 107 *Friendship Selection and Social Class*

From B. L. Neugarten, "Social Class and Friendship among School Children," *American Journal of Sociology*, 4: 311, 1946. Used by permission of the publisher.

western city that had five rather clearly defined social groups: A, the "Old Families"; B, the professional men and business officials; C, the average man—clerk, small storekeeper, skilled laborer; D, the lower-income group—semiskilled, unskilled, and casual laborer; and E, the "Nonrespectables"—keepers or inmates of brothels, gamblers, known criminals, and other shady characters. Results from Group A were not presented, presumably because there were too few children. The highest degree of rejection—and it was mutual—occurred between the "highest" group of children and the "lowest." The pupils in each extreme tended to choose each other exclusively, but those from the two middle areas spread their choices through all classes. The results appear in Figure 107, above.

An individual's selection of friends depends also upon two factors that

are not external—his perception of himself and the nature of his needs.⁴ Everyone has some idea of what kind of person he is, but the average adolescent does not have either a clear or an accurate idea. In some cases there is little relationship between his concept of himself and other adolescents' perception of him. Overestimation or underestimation both contribute to the development of personality.⁵ In general, the greater the agreement between the self-estimate and the objective description by others, the better adjustment one is able to achieve, because there is less need for defense.⁶ For instance, if a boy thinks he has artistic talent when everyone else thinks he has none, he is under constant strain to defend himself against revelation of his probable inadequacy. Or if a girl sees herself as popular and sought after when she is really shunned, she has to be constantly on the watch to defend what she believes is her status. Naturally, everyone makes some errors in self-concept, but adolescents make large ones.

This matter of self-estimate is of importance, since one's concept of one's self inevitably influences one's behavior and one's interpersonal relationships. It probably plays a part also in the selection of an occupation. Probably no one is completely objective about himself, but some people show far less serious errors of estimate than others. The self keeps on growing throughout life, and one's concept should also keep on growing as new experiences and incidents continue to shed light. Probably most people have also an ideal self, toward which they strive. In adolescence, boys and girls begin to wonder just what kind of persons they are and begin to evaluate themselves. The high school could contribute a good deal to this evaluation through the assignments given in various classes, perhaps especially in English. A few adolescents experience little difficulty in answering the age-old question, "Who am I?" but many of them find an answer—if they do—only with difficulty. One element in this process is the identification of one's self with an admired person—a topic that will be discussed more fully in a later chapter. Teachers sometimes serve as the admired person, and through their classwork they can bring the adolescent into touch with a large number of personalities in literature and history, among whom he may find a model for himself. Anything that will aid the adolescent in building up an accurate picture of himself and an ideal self to strive toward is of value in his development.

Perhaps the most useful idea about the selection of friends is the notion

⁴ D. P. Ausubel and H. M. Schiff, "Some Intrapersonal and Interpersonal Determinants of Individual Differences in Socioempathic Ability among Adolescents," *Journal of Social Psychology*, 41: 39–56, 1955.

⁵ H. M. Schiff, "Judgmental Response Sets in the Perception of Sociometric Status," *Sociometry*, 17: 207–227, 1954.

⁶ B. Chodoroff, "Perceptual Defense and Adjustment," *Journal of Abnormal and Social Psychology*, 49: 508–512, 1954, and L. Festinger, J. Torrey, and B. Willeman, "Self-Evaluation as a Function of Attractiveness in a Group," *Human Relations*, 7: 161–174, 1954.

that each individual chooses friends to meet his own emotional needs. The bond becomes firm if the chooser has the qualities that meet the needs of the chosen.⁷ If not, the former hangs around the latter, who rejects him. As an explanation, the mutual meeting of inner needs seems as satisfactory as one is likely to find. This statement does not mean that only opposites attract each other, indeed, the members of a pair of friends often have much the same personality profile⁸ and share the same background and interests, but generally in some one or two respects they complement each other.



Fig. 108. *Per Cent at Different Ages Choosing the Same Person as Best Friend after an Interval of Several Months*

Based on J. E. Horrocks, "A Study of the Friendship Fluctuations of Urban Boys and Girls," *Journal of Genetic Psychology*, 70: 53-63, 1947.

Children and adolescents both tend to choose the same person as a best friend over quite a period of time, the adolescents being appreciably more consistent than the children. One investigator asked groups of school pupils ranging in age from eleven to eighteen to give the name of their best friend, and then six months later asked again for the name of the best friend. Eleven-year-old girls chose the same person 42 per cent of the time, eleven-year-old boys, 5 per cent. At age 18 the corresponding two percentages were 88 and 69. This finding accords with general observation that adolescent friendships are enduring. Figure 108 summarizes the results from this study.

Dates and Dating: Before discussing the various problems inherent in the heterosexual friendships among adolescents, it is instructive to review the interrelationships between boys and girls over their life span to date.

⁷ J. M. Luck, "A Study of Peer Relationships," *Group*, 17: 13-20, 1955; H. L. Koch, "A Study of Some Factors Conditioning Social Distance between the Sexes," *Journal of Social Psychology*, 20: 79-107, 1944.

⁸ J. Maisonneuve, "A Contribution to the Sociometry of Mutual Choice," *Sociometry*, 17: 33-46, 1954.

The main attitudes are shown in Figure 109. Normally, boys and girls develop friendships with each other during the early and middle years of adolescence, with the girls leading the way. Sometimes the transfer from preadolescent friendships with members of one's own sex to the heterosexual

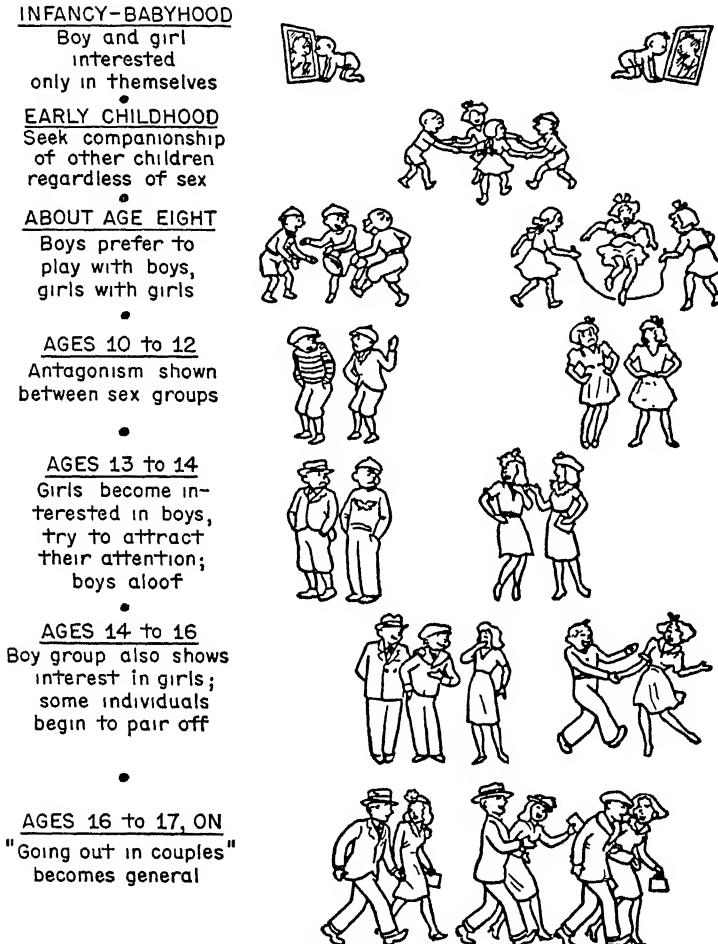


Fig 109 *The Seven Stages of Boy-and-Girl Relationships*

From *Women and Men*, p. 133, copyright, 1943, 1944, by Amram Scheinfeld. Reproduced by permission of Harcourt, Brace and Company, Inc.

interests of adolescence takes place gradually and easily and sometimes it is sudden and bewildering. The wise parent not only refrains from comment or opposition, but is thankful that the transfer has occurred. Whether sudden or gradual, the boy-and-girl friendships of adolescence are essential

to normal adjustment. Nothing that results from them could possibly be as serious as their failure to develop.

The "boy-crazy" and "girl-crazy" periods, which occur at the ages of thirteen to fourteen and sixteen to seventeen, respectively, are extremely trying to adults, but this stage and the many brief, intense episodes during it serve a practical purpose. They give experience in courtship and provide the basis for the subsequent selection of a mate. If a girl is "protected" from such youthful love affairs she is likely in later years to think herself in love with the first man who courts her. If a boy has already had a few attacks of puppy love he knows how to discount mere excitement. Far from being dangerous, the somewhat sentimental boy-and-girl attachments of adolescence are highly educative at the time and are essential for self-protection in the years after home supervision has been left behind.

There was, for instance, a young man of twenty-seven who had been "protected" from girls, partly by an oversolicitous mother, partly by an absorbing interest in schoolwork, and partly by being accelerated so far in school that he was thrown with people socially too old for him. At twenty-seven John had never had a girl friend. He had begun to feel himself abnormal in this respect and had made a few tentative efforts to remedy the matter. He had taken two or three clerks or stenographers to the movies, treating them with exaggerated courtesy. Evidently he did not feel confident enough to make a date with girls from his own social class. After a few months of these tentative social contacts he met and fell in love with a young woman of about his own age—a thoroughly sophisticated girl who had had a number of "affairs," more or less serious. She liked John, enjoyed his somewhat erudite conversation, and found him most useful in running errands for her. Because she generally kissed him good night John assumed they were engaged. In the course of time the inevitable happened. John found out about her affairs, some of which were continuing, and was both hurt and horrified. Suddenly he realized that she was not the good and beautiful maiden he had imagined, but a rather ordinary person of far from conventional morality. This sort of episode should have taken place when John was sixteen or seventeen, living at home with his family. Falling in love with a girl who is not good enough for him is part of every intelligent boy's education, but not after he becomes a man. John's affair took place too late. Instead of getting over it and charging it up to experience, he has developed a hatred for all women and now he has nothing more than purely business contacts with them. At the age of sixteen he might have made a similar response, but it would hardly have lasted long. At present it bids fair to become permanent. There is a time when puppy love is educative, but after the period has gone by it is only destructive.

Investigators have of late years been turning the light of scientific inquiry upon the path of true love. Most high school boys and girls report as normal a series of boy-and-girl affairs, courtships, engagements, quarrels, friendships, crushes, and broken engagements. Numerous difficulties are encountered, especially at first in meeting a sufficient variety of the opposite

sex If the advertisements in the "personal" columns of newspapers and the number of "clubs" of the matchmaking type are any criterion, this problem does not stop with the end of adolescence

By the end of high school, only a few boys and girls still do no dating at all A sample set of results on the frequency of dating appears in Figure 110 below. Slightly over half the boys and girls had not been on

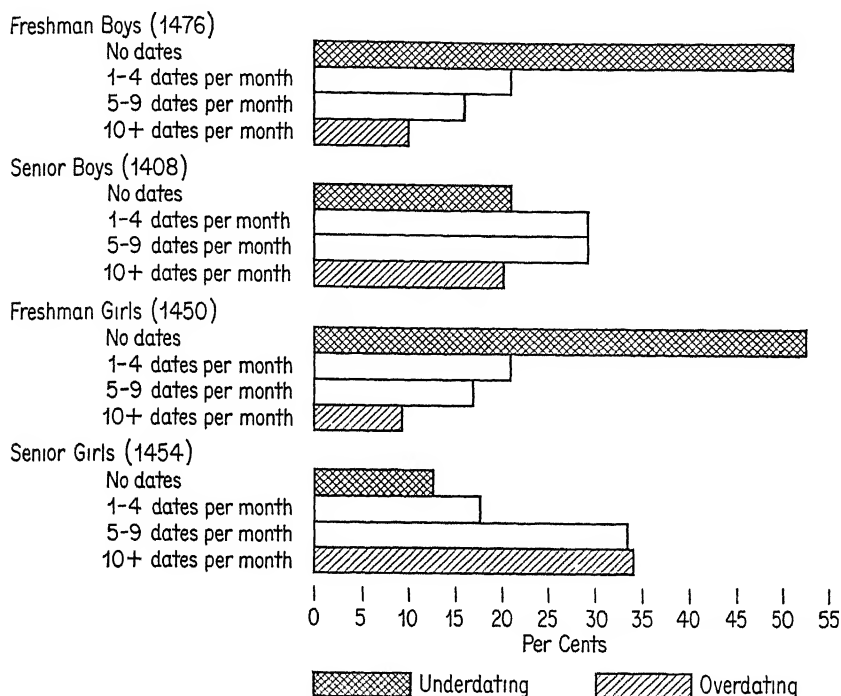


Fig 110 Dating by 2,884 Boys and 2,904 Girls

Based on H H Punke, "Dating Practices of High School Pupils," *Bulletin of the National Association of Secondary School Principals*, 28 47-54, 1944

dates before entering high school, for the more socially adjusted half of each group, the practice evidently began in junior high school High school social life reduced the nondaters to 22 per cent of the boys and 14 per cent of the girls Among the boys there are probably still a few who have not yet summoned the courage to ask a girl for a date, since a boy customarily takes the initiative, but among the girls, those who still have not had dates by the end of their senior year are mostly "rejects," for one reason or another A few are presumably not allowed to go out in the evening, a few are bookworms, a few are unattractive, and a few are still so immature as to have no interest in boys.

There are certain traits that definitely prevent acceptance as a partner for dating. The items listed most frequently by 8,000 boys and girls in high school are listed below. Girls want a date who is well mannered, who makes no undesired advances, who treats them with respect and compliments them—presumably upon their clothes and appearance. After a girl has gone to a good deal of trouble to prepare for her date, she does not like it if her escort never comments verbally upon the results. Boys want a girl who does not look down upon them, who does not refuse absolutely all advances, and who does not make too great demands upon their probably precarious financial condition.⁹

<i>Traits in Boys Considered Undesirable by Girls</i>	<i>Traits in Girls Considered Undesirable by Boys</i>
1 Vulgarity	1 "Putting on airs"
2 Carelessness	2 "Being stuck-up"
3 Withholding compliments	3 Being easily hurt or annoyed
4 Being disrespectful	4 Refusing advances
5 Trying to "neck"	5 Being stingy
6 Loudness	6 Being emotionally cold

In the beginning at least, and often throughout high school, dating is primarily a matter of social support and security. It makes a boy or girl feel accepted and may have little sexual significance. If no opposition is raised by parents it rarely leads to marriage. The first date is likely to be a good deal of a strain for both the boy and the girl because neither knows just what to do or even what is expected. Thereafter, the matter is somewhat easier, but dating contributes so much to adolescent social adjustment that it remains important. At first, boys and girls tend to date with those who are in the same school classes, but later on they branch out a bit. It is probable that the early dates have nothing much to do with preferences on the part of the individuals concerned. A boy selects a girl from his own social class, who may be presumed to have similar ideas and background, so as to ease the initial strain as much as he can, if the girl is reasonably presentable, it does not matter much to him which girl it is, although his own status is enhanced if she happens to be very popular. These tentative efforts at social security usually proceed without serious incident, if the parents avoid an authoritarian approach to the matter. The time for authority has gone by. Perhaps the best approach is to persuade a boy or girl *always* to bring dates home, for at least part of the evening. Nothing convinces an adolescent so quickly that he or she has made an unwise

⁹ H. T. Christensen, "Dating Behavior as Evaluated by High School Students," *American Journal of Sociology*, 57:580-586, 1952.

choice as to see the date against his or her home background. Usually, the parents need say nothing at all ¹⁰

Sometimes adolescents, especially boys, purposely seek dates with those from a lower social class ¹¹ These girls are less demanding than those at their own level This phase is likely to be short and to do no harm, provided it does not meet with opposition Girls tend rather to make dates with boys from an upper social class, probably because marriage is never too far from their minds Since the average marriage age for girls is twenty, they are wise to begin thinking about the matter while they are still in high school

As adolescents grow older, the dating may involve some sexual experiences, which, however, usually stop short of actual intercourse. This phase also has its usefulness, even though it may lead to trouble Since it cannot be prevented, it might as well be used as constructively as possible Table 30

Table 30 ATTITUDES TOWARD PETTING

	Per Cent Answering "Yes"		Per Cent Answering "No"	
	Boys	Girls	Boys	Girls
1 Is it all right to kiss on the first date?	31	33	53	55
2 Should intimate petting be delayed until after marriage?	31	66	39	16
3 Is sexual immorality more wrong for a girl than for a boy?	27	38	42	32

H. T. Christensen, "Dating Behavior as Evaluated by High School Students," *American Journal of Sociology*, 57 580-586, 1952

shows some common attitudes One may regret the too early experiences of some boys and girls, but such episodes take place and are part of an adolescent's education for life

A number of articles have listed the various stages of courtship As good a classification as any appears in Table 31 The average adolescent passes through the first three stages during junior high and high school and reaches the fourth stage at least once The relationship of "going steady" has certain advantages that lure youngsters before they sense its disadvantages It gives security because one always has someone with whom to go to a social function, it makes both members feel popular and grown-up, it gives time for friendship and understanding to develop, and it costs less

¹⁰ J. R. Crist, "High School Dating as a Behavior System," *Marriage and Family Living*, 15 13-28, 1953 Most of the statements in this paragraph come from this reference

¹¹ W. W. Ehrmann, "Influence of Comparative Social Class of the Companion upon Premarital Heterosexual Behavior," *Marriage and Family Living*, 17 48-53, 1955

It is, however, a relationship that is easier to start than to stop, it may become too serious too soon, it is likely to arouse family opposition, it prevents the development of other friendships, and it often ends in a good deal of strain, after which there is likely to be a period of isolation until others discover that the erstwhile "steadies" are back in circulation again

Table 31 STAGES OF COURTSHIP

1 No dating	6 Having a definite understanding to be married on a specified date
2 Occasional dating	
3 Frequent dating	7 Being formally engaged
4 Going steady	8 Being married
5 Having a definite understanding to be married at some future time	

Based on R. F. Winch, "The Relation between the Loss of Parents and Progress in Courtship," *Journal of Social Psychology*, 29 51-56, 1949

Dating behavior and success in courtship are related to family background and interrelationships. Whenever any circumstance had intervened to affect normal relationships between parents and children, the latter were less successful in having dates during high school and in progressing through the normal stages of courtship.¹² The most obvious of such background con-

Table 32 EFFECT OF BROKEN HOMES UPON DATING

Courtship Status	Boys and Girls		
	Boys (Father missing)	(Both parents missing)	Girls (Mother missing)
	(%)	(%)	(%)
High	18	35	43
Low	82	65	57

Based on R. F. Winch, "The Relation between the Loss of Parents and Progress in Courtship," *loc cit*

ditions were the absence of one parent from the family group, the foreign nativity of the parents, open revolt of the children against parental authority, and serious tension of any kind. Senior high school students who did not date at all were found to have an appreciably less wholesome family background than other seniors. As shown in Table 32, boys who had no fathers and girls who had no mothers tended to be low in their ability both

¹² See, for instance, R. O. Andrews and H. T. Christensen, "Relationship of Absence of a Parent to Courtship Status: A Repeat Study," *American Sociological Review*, 16 541-543, 1951, and D. Wallin, "Marital Happiness of Parents and Their Children's Attitudes to Marriage," *American Sociological Review*, 19 20-23, 1954

to make social contacts and to progress through the usual stages of courtship. Orphans were equally ineffective. The figures are clearer for the boys than for the girls. In another study, high school seniors who did not date at all presented a picture of inadequate family relationships, unwholesome attitudes toward themselves, negative attitudes toward others, and poor adjustments in even the most casual of heterosexual contacts.

As in the selection of friends, mere propinquity plays a role in the selection of a mate. In a sample study, 54 per cent of the engaged couples lived near each other.¹³ In another, 91 per cent of the couples belonged to the same religious group, 58 per cent to the same race, and 83 per cent to roughly the same social class.¹⁴ These background factors are far more important in choosing a life partner than they are in choosing a friend. It is probable that the selection also rests upon the mutual needs of the two persons involved.¹⁵ Such complementary needs would pair off the dominating character with the one who wants to be dominated, the humorist and talker with the listener, the erudite man with the dull but pleasant woman, the young man in need of a mother-substitute with an older woman, the shy girl with a man old enough to give her security, and so on.

Engagement is a stage of courtship that seems very necessary. Without it, the chances for marital happiness are definitely lowered. It is now the custom for an engagement to last not more than six months, if that long. In Grandmother's day it lasted longer.¹⁶ Its usefulness is attested to by the number of people who have been engaged two or three times and have broken off such relationships because—during this period of concentration upon each other—the two people concerned found that they were not as congenial as they had thought.¹⁷ In one investigation of 1,000 engaged couples,¹⁸ it was found that 24 per cent of the men and 30 per cent of the women had been engaged at least once before.

Most early adolescent love affairs come to an end. Thus, one investigator found that only 15 per cent resulted in marriage. The commonest reasons for the end of romance were geographical separation, dissatisfaction of one or both members, and interference of adults.¹⁹ In the same study,

¹³ A. C. Clarke, "An Examination of the Operation of Residential Propinquity as a Factor in Mate Selection," *American Sociological Review*, 17 17-22, 1952.

¹⁴ A. B. Hollingshead, "Cultural Factors in Mate Selection," *American Sociological Review*, 15 619-627, 1950.

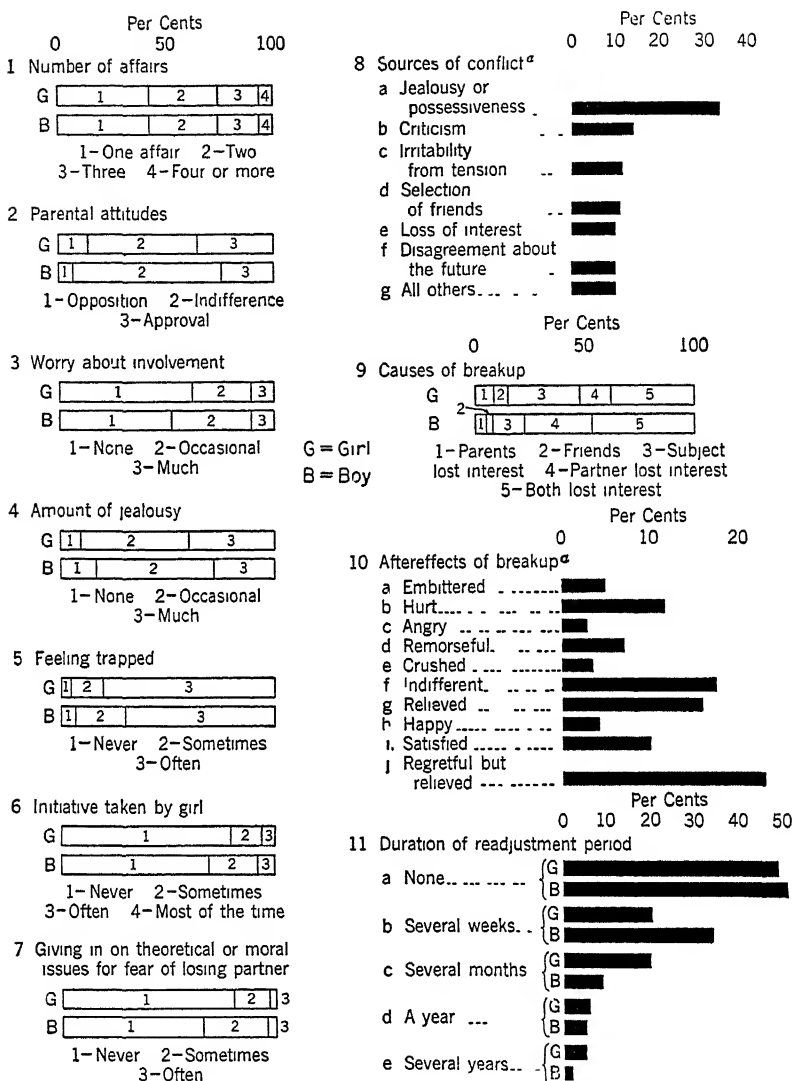
¹⁵ R. F. Winch, "The Theory of Complementary Needs in Mate Selection," *American Sociological Review*, 19 241-249, 1954.

¹⁶ M. R. Koller, "Some Changes in Courtship Behavior in Three Generations of Ohio Women," *American Sociological Review*, 16 366-370, 1951.

¹⁷ H. J. Locke, *Predicting Adjustment in Marriage*, Henry Holt and Company, 1951, 407 pp.

¹⁸ E. W. Burgess and M. Fishbein, *Successful Marriage*, Doubleday & Company, 1955, 552 pp.

¹⁹ C. Kirkpatrick and I. Caplow, "Courtship in a Group of Minnesota Students," *American Journal of Sociology*, 51 114-125, 1945.



^a For these two items, the answers of boys and girls have been combined

Fig. 111 *Love Affairs*

Based on figures in C Kirkpatrick and I Caplow, "Courtship in a Group of Minnesota Students," *American Journal of Sociology*, 51 114-125, 1945

college students of both sexes were asked a number of questions concerning their previous and current attachments. The results appear in Figure 111. The students admitted frequent affairs, conflicts over becoming too involved, over jealousy, friction, or tension, and over the feeling that they had become trapped. The chief cause for termination of an affair was a loss of interest

on the part of one or both of the partners. The resulting feelings of relief, satisfaction, happiness, and indifference far outweighed those of bitterness, sorrow, or remorse. Over half of the students reported no shock at all, although in a few instances the trauma was severe. Readjustment was immediate for half the boys and girls, but for a few, the aftereffects lingered on for a year or more. When an adolescent does not recover from a broken affair within six weeks or so, there is probably some weakness in the structure of his personality.

Leadership

Because of the social prominence of the leader and because of his strategic position, psychologists have been trying for years to find out what qualities result in leadership. Although the number of leaders is small, their influence is always large because of their position in their own society. The high school that can influence its student leaders to exercise their power along desirable lines is not likely to have serious difficulties with the student body as a whole. An understanding of leaders thus seems highly desirable.

Within the last decade there has been a revival of interest in leadership, possibly as a reflection of how badly the world needs wise leaders in most of its activities. The Army and the Navy have also been greatly interested in the problems of leadership, since in these days of mobile warfare there has to be a leader for even small units, with authority to make at least minor decisions. Various individuals and committees have listed the important problems that must be answered before the phenomenon of leadership can be adequately understood. One such list appears below.

Who are the leaders?

Of what does their leadership behavior consist?

What traits are associated with leadership behavior?

What situational factors produce leadership behavior?

What are the results on the participants of leadership behavior?

What motivates the leader and what satisfaction does he receive?

How permanent is leadership?

Can leadership be developed?

How can leaders best be identified?

Why is the relation between leadership and either high intelligence or high academic achievement usually so low?²⁰

To date, a beginning has been made on some of these problems. Within another fifteen or twenty years most of them will have received at least a partial answer.

It already seems quite clear that leadership rests not only on the traits

²⁰ R. T. MORRIS and M. Seaman, "The Problems of Leadership: An Interdisciplinary Approach," *Journal of Sociology*, 56: 149-155, 1950.

of the leader, but also on the needs of the followers at the moment. That is, a given group situation calls for, and gets, a leader, the leader does not go hunting for a group. Hence, presumably, the many "types" of leaders, since different individuals are required to meet the varying needs of the same or different groups at different times and in different situations. Leadership is therefore both a function of group structure and a result of personality. Thus, an Augustus, a Savonarola, a Metternich, a Robespierre, a Garibaldi, or a Hitler is called forth by the needs of the people, but these men became leaders because they possessed the particular cluster of traits that fitted them to meet the needs. If American students of 1958 cannot understand why Hitler *could* have become a leader, it is mainly because they are not German students of 1930. Leadership is therefore a spontaneous sort of social interaction between individuals and groups. If the needs continue or if the behavior and personality of the leader arouse emotional reactions of an enjoyable sort, the leader maintains his position, but if the needs are satisfied or if the leader arouses antagonistic emotions, his position becomes precarious and he is able to continue only if in the period of his real leadership he has built up enough control and power to maintain himself, even though he has become unpopular. As time passes, both the members of a group and its leaders change, and yesterday's idol becomes today's forgotten man.

Groups have many characteristics, and no two are exactly alike. Some of the determining factors are quite obvious, but others are considerably less so. The most important determinants are listed below, with a pair of contrasting examples, taken from college life, after each.

GROUPS VARY FROM ONE ANOTHER IN ²¹

1 *Size*

Lecture class in elementary chemistry (large)

Seminar in metallurgy (small)

2 *Homogeneity*

College preparatory Latin class in an expensive, exclusive, private girls' school (homogeneous)

Freshman English class in an average American high school (heterogeneous)

3 *Flexibility*

College glee club (established, persisting mode of behavior)

Departmental clubs (no established model, clubs come and go)

²¹ Based on R. M. Stogdill, "Personal Factors Associated with Leadership: A Survey of the Literature," *Journal of Psychology*, 25 35-71, 1948, and J. K. Hemphill, "Situational Factors in Leadership," *Bureau of Educational Research Monographs*, Ohio State University, no. 32, 1949, 136 pp.

4 *Permeability*

Small, self-contained, highly "social," snobbish fraternity, whose members mix little with others

Good-fellowship club, to which anyone can belong and whose members mix with everyone

5 *Polarization*

Campaign committee for electing the campus queen (a group with a single, clear goal)

Executive committee of the student government (a group that deals with whatever needs to be done)

6 *Stability*

Basketball team, honors society (these exist year after year)

Chess club, fencing team (these depend on whether or not anyone is interested)

7 *Intimacy*

Sorority (everyone knows everyone else)

Political club (members are only acquaintances)

8 *Control*

Training table (diet is controlled)

Eating club (for pleasure and sociability, no control over diet)

9 *Potency*

Phi Beta Kappa, fraternities, varsity teams (strong drives satisfied by membership)

Debating teams, dance committees, newcomers' club (relatively weaker drives satisfied by membership)

10 *Affective tone*

Special sections for best students (agreeable feelings associated with membership)

Special sections for students on probation (unpleasant feeling tone)

11 *Participation of members*

Discussion class	} of same size
Lecture class	

12 *Dependence*

Cast of a play (dependent on stage manager, without whom rehearsals usually do not even start)

Staff of college newspaper (not dependent upon the physical presence of the editor to get started)

As the groups that need leaders vary in their composition, so does the nature of the leader who best meets the requirements

In recent years there has been a good deal of discussion as to the rela-

tive advantages of the "group-centered" and "leader-centered" types of leadership.²² In the former type, the presumed leader stays in the background, elicits as much as he can from the group members, and merely guides them in their thinking. His main objective seems to be to work himself out of a job. He tries to get the group to lead itself. If a leader is of the second type, he will impose his ideas upon the group, insofar as he can, and leave the participants less able than they were before to think for themselves. So far as mental health is concerned, probably the first type is superior to the second.

Leadership seems to consist of a cluster of traits, a few inborn but most of them acquired or at least developed by contact with environment. It is also a permanent type of behavior, the leaders in elementary school usually become leaders in high school and in time become leaders in college.²³ As a general thing, leaders are superior in several respects: they are above average in physical equipment, intelligence, vitality, attractiveness, range of interests,²⁴ and scholarship. But they have other traits as well, it is not enough to be healthy, energetic, bright, and interested in schoolwork.

Most studies of student leaders have consisted in locating, either through observation or by the adolescents' own ratings of each other, the leaders in a school and then comparing the standing of these leaders in a number of traits with the standing of the other students of the same age in the school. A typical study of leaders is summarized in the next few paragraphs.

An investigator asked all the 223 students in a private junior college, between the ages of sixteen and twenty, to state their choices for the chairman of a certain project, and for a roommate. They were also asked to give the names of those they thought least likely to succeed as chairman or least acceptable as a roommate. The answers of the entire student body were then divided into four sections, as shown in Table 33. More students were rejected as leaders than as roommates, presumably because many amiable people who are nice to live with have no ability to lead. Study of the first and second groups showed three main differences between them. The leaders expressed the positive emotions—joy, pleasure, satisfaction, humor, happiness—while the rejected specialized in negative reactions—gloom, anx-

²² For discussion of these points of view, see T. Gordon, "The Challenge of a New Concept of Leadership," *Pastoral Psychology*, 6:15-24, 1955, and "Leadership: Shall It Reside in the Leader or in the Group?" *American Journal of Nursing*, 54:1087-1088, 1954; G. A. Talland, "The Assessment of Group Opinion: Typical Leaders and Their Influence on Its Function," *Journal of Abnormal and Social Psychology*, 49:431-434, 1954; R. H. Wischmeier, "Group-Centered and Leader-Centered Leaders: An Experimental Study," *Speech Monographs*, 22:43-48, 1955.

²³ H. M. Hodges, "Campus Leaders and Nonleaders," *Sociology and Social Research*, 37:251-255, 1953.

²⁴ J. C. Gowan, "The Interest Patterns of Student Leaders," *Educational Psychology Measurement*, 14:151-155, 1954.

iety, and hurt feelings. The leaders had definite goals in their activities, while the rejected did not seem to be going anywhere in particular. The leaders gave others a sense of security, but the rejected merely made others feel uncomfortable. The neglected ones, who were simply forgotten, proved upon investigation to show little emotional reaction of any kind, to be formal and correct in their demeanor, to be easily distracted from any goal

Table 33 GROUPINGS ON THE BASIS OF POPULARITY

	<i>Chairman of Committee</i> (%)	<i>Roommate</i> (%)
1 Those who received more choices than rejections	17	40
2 Those who received more rejections than choices	50	23
3 Those who received the same number of each	18	34
4 Those who received neither rejection nor choice	15	3

Based on M. A. Price, "A Study of Motivational and Perceptual Factors Associated with Leadership Behavior of Young Women in a Private School," *Ohio State University Abstracts of Dissertations*, no. 58, 1950, pp. 59-64.

they might have, to be quite banal in their thinking, and to have few friends or even acquaintances. They were not noticed even enough to be rejected.

A psychologist cannot yet definitely say which child will become a leader, but the many specific investigations at least set the limits of personality within which to look for the leaders of the next generation. The necessary traits may be listed and classified as indicated in the following list:

1 *Capacities* (inborn or acquired early in life) Average or better intelligence, mental alertness, verbal facility, good health, efficiency, animal courage, cheerfulness, humor, maturity.

2 *Attainments to date* Average or better schoolwork, athletic accomplishments, former experience as leader, special knowledge needed by situation.

3 *Appearance and manner* Average or better attractiveness, appropriately clothed (as judged by standards of group to be led), good voice, features, body build, and poise.

4 *Motility* Unusual degree of participation in whatever is going on, greater than average activity, enthusiasm for undertakings.

5 *Contacts with others* (1) Aggressiveness, self-confidence, ambition, initiative, persistence, (2) dependability, integrity, responsibility, (3) sociableness, kindness, approachability, co-operativeness, adaptability, capacity to mix with subordinates without making them feel subordinate, willingness to stay within conventional limits.

6 *Special intellectual qualities* Judgment, originality, insight into people and situations, impartiality (ability to see both sides), diplomacy.

7 *Background factors* Better than average social status, better than average income, membership in family that already has leaders in it²⁵

It should be noted especially that under the fifth heading there is a subdivision of traits, some of which not only seem contradictory but are. They are all needed, however, in order to maintain balance. A leader is aggressive, but his aggressiveness is controlled by his sociability and his willingness to conform to social standards. If these other traits were lacking, he might become a braggart or a delinquent, both of whom are also aggressive. A leader gets along well with others, but without his ambition and persistence he would be just another good mixer and pleasant companion. And even though an individual has great initiative and much social ability, he still will not lead for long unless he can be trusted. As one thinks of the various types of would-be leaders, one can see what they lack. Thus, the fanatic has great enthusiasm, self-confidence, and drive, but lacks judgment and can see only one side of a question at once. And the foreign agitator comes a cropper because his appearance, features, build, voice, clothes, and manners are not those of the people he wants to lead.

In general, leaders are superior individuals who come from a superior background²⁶ in which they have found the elements needed for adequate self-development. One of the better ways to become a leader is to be born into the right family! This idea is thoroughly undemocratic, but it is true. It is especially true in a high school because the pupils are at an age when they put great stress upon appearance, dress, manners, and social competence—exactly the traits that an adolescent from a good home acquires without effort. Those from inferior social backgrounds may and do sometimes become leaders, but not easily.

It may be noticed that the capacity to learn out of a book does not contribute much to leadership, perhaps because the student who reads many books learns about books instead of about people. Also, he has less time to be with people than he would otherwise have. He can therefore hunt down an elusive reference in a catalogue but not an elusive antagonism in a group. It is not surprising that the student who impresses his age-mates as undisguisedly intelligent or as having superior academic standing does not

²⁵ Adapted from B. M. Boss, C. R. Wurster, P. A. Doll, and D. J. Clair, "Situational and Personal Factors in Leadership among Sorority Women," *Psychological Monographs*, Vol. LXVII, no. 366, 23 pp., 1953; E. S. Dexter and B. Stein, "The Measurement of Leadership in White and Negro Students," *Journal of Abnormal and Social Psychology*, 51: 219-221, 1955; F. E. Fuller, "Good Leadership: Nature or Nurture?" *Contact Pensacola*, 12: 22-24, 1954; R. M. Hodges, "Campus Leaders and Nonleaders," *loc cit*, E. P. Hollander, "Study in Group Leadership among Naval Aviation Cadets," *Journal of Aviation Medicine*, 25: 164-170, 1954; J. B. Marks, "Interests, Leadership, and Sociometric Status among Adolescents," Ph.D. Thesis, University of California, 1952; M. Roff, "A Study of Combat Leadership in the Air Force by Means of a Rating Scale," *Journal of Psychology*, 30: 229-239, 1950; R. Stogdill, "Personal Factors Associated with Leadership," *loc cit*.

²⁶ F. J. Reynolds, "Factors of Leadership among Seniors of the Central High School of Tulsa, Oklahoma," *Journal of Educational Research*, 37: 356-361, 1944.

often become a leader. This is not the same thing, however, as saying that intelligence has no relation to leadership. Certain phases clearly have—judgment, versatility, organizing ability, originality, alertness, and insight, for instance. Even tests of “intelligence,” which admittedly measure only one or two phases of mental ability and measure academic skills at the same time, show a medium amount of correlation with leadership, probably because they indubitably measure the alertness and quickness of one’s mental machinery. If they tapped other mental abilities also, the correlation would probably be much higher.

The two students described below belong to quite common types of high school leaders. An experienced teacher can probably identify both among the boys and girls she has known.

Dot and Fritz are both leaders in a small high school. Both are seniors. In a recent sociometric study they were the two main “stars” of their class.

Dot is a rather small but extremely lively girl. She radiates good health and normalcy. She is not pretty, but she is attractive in both face and figure. Her intelligence is in the highest 25 per cent of the class, but not in the highest 5 per cent. She comes of a good family, and she is always well and appropriately dressed. Her classwork is above average but not so good as to arouse either envy or scorn among her peers. She does a reasonable amount of studying, but not too much. Her mind is nimble and of an inquiring nature, but she is satisfied with small bits of knowledge about many things and shows no desire for real mastery in any field. She is an excellent conversationalist. Dot has many interests, she is the drum major for the school’s band, a cheerleader, a member of the school glee club, secretary of the senior class, president of two school clubs, and a member of the editorial board for the school yearbook. She never lacks invitations to dances and parties. Both boys and girls like Dot, and she has become an arbiter in social matters. She has a fair amount of tact and a moderate understanding of people, but she depends upon appearance, family background, and manner for her popularity rather than upon any remarkable ability to understand others. When one examines Dot’s record and watches her behavior, one learns something more about her. She has never been in any disciplinary difficulty, she observes the conventions, and her behavior, while lively, is never indiscreet or indecorous. This strain of propriety in her make-up is of value to her because it commands respect from both boys and girls and prevents her name from being linked with scandals, unfavorable gossip, or revolts. Dot has abounding vitality, manifold interests, a quick mind, a pleasant appearance, a good background, irreproachable manners, a moderate degree of extroversion, and a fair understanding of people. Presumably, like everyone else, Dot has some small problems, but there are no serious conflicts or tensions in her life. Dot’s chief charm lies in her normalcy.

Fritz is high-strung, handsome, intelligent, and very successful as an athlete. He is a member of all the school’s major teams, but has been especially satisfactory as a quarterback. Fritz is a good student and would be an excellent one if he had more time for study. As it is, he will be on the school’s honor list. His IQ has varied on different tests from 130 to 150. He intends to be a doctor, and will

probably become a serious student as soon as he passes beyond the age for school and college athletics. Fritz tends to burn himself out by the intensity of his application to whatever catches his interest, and to be rather moody, his periods of exertion and excitement are often followed by periods of sloth and irritability. He is nervous, but he has remarkable control, and the greater the pressure, the cooler he gets. Fritz's good looks make him popular with the girls, and his athletic success makes him the idol of the boys. Fortunately, Fritz's real interests are in intellectual pursuits—although he keeps this fact carefully hidden—and his prowess at running and throwing and jumping strikes him as incidental, childish, and amusing. Athletic success has its values for him, and he uses it for all it is worth, but he has no illusions about it, and his ideals lie elsewhere. This boy's greatest defects of personality are the shortness of his temper, his impatience, and his sensitiveness. Leadership was made easy for him by his size and strength, at entrance to high school he was already postpubescent, he was taller and heavier than his classmates, and he had already passed through the period of poor muscular co-ordination. His social abilities are only average, but they are good enough to maintain his status. Fritz's interests are rather narrow. He belongs to only one club, in addition to athletic teams, and is the president of the school's athletic association. During his junior year he was one of the student judges, and was re-elected this year but resigned because the sessions conflicted with his chemistry laboratory.

As may be seen, these two leaders are successful for different reasons. Fritz depends upon maturity, physical size, good looks, intelligence, athletic success, a controlled quickness, a high degree of concentration, and general good judgment. He was not a leader in childhood and is one of those who had to conquer himself before he could lead others. He has proceeded along the usual path to male adolescent leadership, via size and athletic prominence. Although Fritz is still quick-tempered and although he has moods and is a sensitive boy, he has no strain of the prima donna in him. He is modest about his success as a quarterback largely because he does not enjoy the furor and because he does not think football really important. Dot is of a quite different type. She shares Fritz's pleasant appearance, but she depends chiefly upon her healthiness, her vivacity, her drive, her quick interests, her alertness, her skill at repartee, her social prominence, her conformity, and her musical talents for her success. Moreover, she enjoys being a leader. She has been one ever since she can remember. She probably has more understanding of people on a rather superficial level than Fritz, but his grasp is deeper. She is also less mature, except in her willingness to conform to approved custom. In both cases, family status is an important background factor.

There have been a considerable number of efforts to classify leaders into types, but none of them have been especially successful or convincing. Most of the earlier efforts came out with such descriptive tags as the patriarchal sovereign, the tyrant, the organizer, the hero, the love-object, and the recipient of aggressive drives.²⁷ A more recent study characterizes leaders as (1) the problem solver, who has high intelligence, plenty of ideas,

²⁷ C. M. Fleming, "Factor Analysis of the Personality of High School Leaders," *Journal of Applied Psychology*, 19: 596-605, 1935.

and great superego strength, (2) the salient leader, who is adventurous, full of enthusiasm, and low in anxieties, (3) the sociometric leader, who easily gets attention and is able to dominate others, and (4) the elected leader, who has ideas and shows low tension²⁸ While these categories use a psychoanalytic vocabulary, they do not seem to the writers to contribute much more than the earlier type of rough characterization did to the understanding of why John becomes a leader and James does not. An adequate classification of leaders still remains to be made.

Leaders are more active than nonleaders in the social life of the school, but one does not know if they are leaders because they are active or are active because they are leaders. For instance, one group of 40 leaders²⁹ had a total of 272 participations in extracurricular activities as compared with only 70 for 40 nonleaders. They averaged nearly 7 activities each to 2 each for the latter group. The leaders received 80 special recognitions of one kind or another and spent a total of 255 hours a week in sports as compared with 1 special recognition and 47 hours spent in sports for nonleaders. They drove cars more, danced more, went to three times as many parties, listened twice as much to the radio, went twice as often to movies, and read more. In short, they were leaders!

If one wants to find out who are the current leaders one had best ask the students. An observant teacher can contribute something, but she is not among those being led. Moreover, a single teacher knows only a portion of the pupils in her school, in actual fact, nearly half the students in a large school may not be sufficiently known to any teacher to receive even one adequate and competent rating. Perhaps ratings by both age-mates and teachers should be collected in any selection of leaders, since the two generations use different criteria. Teachers tend to overrate those who are courteous and responsive in class and those who work well as long as they are controlled from above.³⁰ They tend to underestimate any student who annoys or challenges them or does poor work. Since teachers see students primarily in class, it is natural that they should make these errors. Students rate each other mostly on what happens outside class. They tend to under-rate those who are popular with their teachers and those who challenge accepted student leaders. Agreement in selecting students who have the most friends (not the same thing as leadership but certainly connected with it) turned out to be 45 per cent for those said to have the most friends and 28 per cent for those reported to have the fewest. Probably both teachers' and peers' ratings have value, but they are not interchangeable. Army psy-

²⁸ R. B. Cattell and G. F. Stice, "Four Formulae for Selecting Leaders on the Basis of Personality," *Human Relations*, 7:493-507, 1954.

²⁹ M. Smith and W. C. Nystrom, "A Study of Social Participation and of Leisure Time of Leaders and Nonleaders," *Journal of Applied Psychology*, 21:251-259, 1937.

³⁰ M. E. Bonney, "Sociometric Study of Agreement between Teachers' Judgments and Students' Choices," *Sociometry*, 10:135-146, 1947.

chologists found that the "buddy" ratings of leadership—that is, judgment of one cadet by others—were far more valuable than officers' ratings, that they were good enough to be used in the selection of candidates by the end of the first month of training, whereas the officers' ratings showed agreement with ultimate success only at the end of the fourth month³¹ In the selection of candidates for training as officers, the Army found personality at least as important as technical excellence and in some cases a great deal more important³² There was no discernible relation between academic grades and success as an officer³³ The relation of marks to leadership or of intelligence to leadership is usually positive but low³⁴

No one knows as yet whether or not leaders can be developed out of human material that does not already have the main qualities needed before the training is begun Thus far, efforts to turn nonleaders into leaders have not been especially fruitful,³⁵ but perhaps in the future it can be done Possibly it will have to be done, since there do not seem to be enough "born" leaders

The task of following up a group of students after they leave school requires an enormous amount of work and a staff of fieldworkers who have a dash of both the bulldog and the bloodhound in them The American family's well-known habit of constantly changing its abode and of losing contact with its younger members makes the tracing of experience subsequent to school days extremely difficult There are, therefore, relatively few studies on this point One, however, may well be quoted³⁶ A follow-up of all the 485 living graduates of ten consecutive classes, 1927–1936, of a small high school to determine their degree of leadership in their community gave interesting results, which are summarized in Table 34 Adult success in leadership was judged on the basis of general reputation, positions of trust (school superintendents, bank managers, judges, superior officials), or superior positions in business or industry, ownership of business, and election to chairmanship of community undertakings In their high school days the 186 male graduates had shown the four levels or kinds of leadership in school life 64 were prominent athletes, 22 played dominant roles in nonathletic student affairs, 23 were outstanding in both these classifications, and 77 had

³¹ R. J. Wherry and D. H. Fryer, "Buddy Ratings: Popularity Contests for Leadership Criteria," *Personnel Psychology*, 2: 147–159, 1949

³² Roff, "A Study of Combat Leadership in the Air Force by Means of a Rating Scale," *loc. cit.*

³³ H. E. Page, "Detecting Potential Leaders," *Journal of Aviation Medicine*, 19: 435–441, 1940

³⁴ C. E. Howell, "Measurement of Leadership," *Sociometry*, 5: 163–168, 1942

³⁵ V. Bailard, "Developing Leadership," *Personnel Guidance Journal*, 32: 135–138, 1953; D. C. Barnlund, "Experiments in Leadership Training for Decision-Making Discussion Groups," *Speech Monograph*, 22: 1–14, 1955

³⁶ J. J. Crowley, "High School Backgrounds of Successful Men and Women Graduates," *School Review*, 48: 205–209, 1940

no record of any leadership. Nearly two thirds of the second and third groups became leaders in adult life. The student who was prominent in athletics but nothing else did not fare so well in later years. Only a few nonleaders in high school became leaders as adults. Among the 299 women

Table 34 LEADERSHIP IN COLLEGE AND COMMUNITY

	<i>Number of Men</i>	<i>Number and Per Cent Who Became Leaders</i>
1 Leadership in athletics	64	10 (15%)
2 Leadership in student affairs	22	14 (65%)
3 Leadership in both	23	14 (60%)
4 Leadership in neither	77	11 (15%)
Total	186	

Based on J. J. Crowley, "High School Backgrounds of Successful Men and Women Graduates," *School Review*, 48:205-209, 1940.

graduates, only 59 had occupied positions of leadership in school. Of these, 37 per cent held such positions as adults. Only 2 per cent of the 240 other women graduates, all nonleaders in high school, had had success as leaders in their communities.

Studies, however efficient, of current leaders are not likely to give certain of the facts that are most necessary for understanding the phenomenon of leadership. Longitudinal studies that began when a child entered grade 1 and went on when he left high school (or college, if he attended one) would add much that cannot otherwise be discovered. It is the conviction of the writers that a research fund could hardly be spent more wisely than on a study of leadership as comprehensive as the long-time study of genius now well into its fourth decade of work at Stanford University. With such a program it might be possible to determine what makes a leader and why he or she can influence others. This knowledge would naturally result in an effort to educate adequately the leaders of the next generation. Through the training of leaders the situation offers unparalleled possibilities for influencing public opinion, both during the school years and in adult life.

Summary

It seems fairly clear that the simple factors of propinquity and common membership in various groups operate to delimit the choice of friends. But there are other elements. The two elements mentioned above merely furnish the framework. From the available supply each adolescent chooses those who best fit his own personal needs, either because they are like him or because they are not! Some friendships are based upon simi-

larity of traits and interests, others show the leader-follower pattern. In addition to these are the friendships in which the respective weaknesses and strengths of the two friends complement each other. The problem of who will be attracted to whom and why is far from being solved.

Dating is an almost universal social enterprise among America's adolescents. In the early stages at least it seems to offer primarily social security. The relationship may develop into a love affair, but usually it does not. In the course of adolescence most boys and girls have a number of brief affairs, which furnish them with the experiences they need in order to know what kind of person they really wish to marry in later years. Such love affairs can be serious, but they can also be educative.

One of the crucial problems concerning leadership is that of possible training, because not enough "natural" leaders seem to be born in any generation. It is unlikely that a person with none of the necessary characteristics can remake himself into a convincing leader, but it may be that those with a few of the needed traits might be adequately trained, at least for minor roles. That is, perhaps they could be, if one could decide just what traits were needed. It does seem to be established that different types of individual are required for different kinds of leadership, but a good deal more needs to be known about both leaders and groups before the interaction can be properly understood.

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18

Home and Family

Teachers have at least two good reasons for wanting to understand homes. The first is that homes have a profound effect upon the behavior and attitudes of pupils. Without some knowledge of their home conditions, a teacher cannot understand her students and cannot, therefore, adjust her work to their needs or help them in their personal development. The second reason is that her classroom is a kind of home, and she should know what the characteristics of a good home are so that she can introduce these into her classroom, thus making it a good environment for her students. This chapter will therefore present certain basic data about the trends in the modern development of the family, the structure of families, the patterns of parental behavior, the effects of the home upon its children, the special sources of difficulties during adolescence, the desirable characteristics of a home for adolescent boys or girls, and some of the undesirable outcomes if normal developments do not occur.

The Modern Family

The American family has changed greatly during the last half century. In 1900 most families were still country families or else they had become urban so recently that the mores of the country were still being observed. In a rural setting the family has strong bonds of kinship, which furnish the basis for most activities, it depends upon propinquity for most of its social life, and it is an excellent transmitter of established tradition.¹ In contrast, the urban family attaches little value to mere kinship, its members tend to place personal interests above blood relationship, and the urge to carry on activities "as a family" is low. It does not need to rely upon propinquity for social intercourse because rapid transportation permits a member to have geographically distant friends. Members are concerned with cultural, social, and economic status—and are often driven into the familiar pattern of living beyond their means in order to make a good

¹ See E. G. Erickson, *Urban Behavior*, The Macmillan Company, 1954, 482 pp.

showing in the community. The personal bonds are loose, the children have lives of their own, adolescents tend to drift away from home, grown sons and daughters live at a distance and may become completely out of touch with relatives, and old people no longer expect to be supported by their grown children or to live with them. At the present time, the pattern of the urban family is almost universal, even among those who actually still live on the land, since modern transportation and communication make mere distance no longer a serious handicap. During a year, the small child in a rural family probably travels farther, going back and forth to school, than his grandfather traveled in a lifetime. As a result of this relatively new family pattern and of modern conditions, there have been many changes in such matters as the selection of mates, the number of children, the relative authority of mother and father, the relation of the parents to each other, the nature of home discipline, and the stability of the union. All these changes have affected the attitudes of the children toward family life and their relationship to their parents.

Modern marriage is based upon a mutual sexual attraction, romantic interest, and glamour, with little consideration of suitability, financial arrangements, social contacts between the two families involved, future care of any children, or more thought of stability than the perennial conviction that love will last forever. The present theory seems to be that these practical problems will be worked out after the marriage, not before. Most young men are looking for a glamorous, exciting mistress with a pretty face rather than for a good housekeeper or a satisfactory mother for their children. A young woman is trying to attract a handsome, exciting, romantic lover, although she does have some thought of improving both her social and economic position. At the beginning, marriage is chiefly a man's diversion, but to a woman it is always a career, even if she has a profession or a job outside her home. As the marriage continues, the woman's role becomes more difficult, especially if there are children. She must remain glamorous, she must be motherly, she must be domestic, she must be an intelligent companion, she must maintain the family's social prestige, she must be the chief emotional prop of the household, and quite possibly she may want to pursue some line of work outside her home. The father's role, while onerous, is simpler: he has to earn money. He almost always spends the major part of the day away from his home and family. He is likely to find satisfaction and stability in his occupation, if it is at all suitable, but he often becomes a secondary figure in his home because his children see so little of him. The patriarchal father whose word is law has practically disappeared from the American scene, largely because social conditions have caused the foundations on which he stood to crumble. He no longer has any actual power over either his wife or his children. However, the modern father usually

ties to be a friend to his children and is sometimes so successful that they look to him for their main emotional satisfactions

The mother's relation to the children is complex. She is almost the only influence in a baby's life until it is about two and she is the main figure until the child enters school. Her position is so commanding that American families are more in danger of matriarchal than patriarchal domination.² The mother's position as the most immediate love-object is, however, more or less offset by her position as the source of control. She does most of the reproofing and punishing because she is on the scene, and in the case of her daughters she does practically all of it. The American mother serves, also, for her daughters as a figure with whom they can identify themselves—that is, she can be, and usually is, a model that her daughters imitate. As long as her sons are little boys, they too are likely to worship their mother, but as they grow older, they cannot identify themselves with her. They must leave her and prepare to enter the masculine world. The boy's typical revolt against the dominating feminism of both home and elementary school is to become tough, to excel in games, to be irresponsible, to pummel his companions and be pummeled by them, to play hooky, to be unpunctual, to neglect home chores, to admire "badness," to protest against going to church or Sunday school (unless his father also goes), and in general to react in a negative way to whatever seems to him to be feminine. This reaction is normal and healthy. Perhaps the members of those primitive groups who separated boys of nine or ten from their mothers and educated them together under exclusively masculine guidance were not such poor psychologists. In the modern family, the father should step in to become the guide, friend, and model of his son.

The modern marriage is seriously lacking in permanence. The causes of its dissolution are many, but important among them is the basis upon which the marriage rests. Both husband and wife founded their marriage on romance, sex, and glamour. The romance may survive, but the glamour will not. If the partners become good friends the marriage has at least a chance. Since, however, the man was originally attracted by his wife's appearance, he is likely to find her first pregnancy a trial. Gone is the slender, alluring, eager, energetic girl he fell in love with, and in her place is an awkward, lethargic, unaesthetic young woman. If a man marries because he wants children, he may be as interested and excited about the pregnancy as his wife, but if what he wanted was a mistress, he is likely to react negatively to her condition. He also finds the next year or two after the child's birth very difficult. Even if his wife regains her previous appearance, he has to share her attention with her child. Moreover, he and she cannot go out together any longer, unless the child can go with them or a

² E. A. Strecker, *Their Mothers' Sons: A Psychologist Examines an American Problem*, J. B. Lippincott Company, 1946, 220 pp.

baby-sitter can be found. A marriage founded upon romance, good times together, and glamour is ill-equipped to survive such strains.

A second source of difficulty arises from the modern theory that marriage is a relation between two people and not between two families. When any two people fall in love, there is no guarantee that their backgrounds are such that they can live together in harmony, no matter how much attraction they may feel toward each other. As long as families did the choosing, certain problems of adjustment did not arise. For instance, Catholic families did not choose Jewish ones, a native family did not choose a foreign one, and wealthy or high-status families did not choose their opposites. Consequently, the young people had much in common, and they were not likely to have trouble with their in-laws, since each had been approved by the other's relatives. The modern engagement is usually contracted between two young people who are unknown to each other's families. They may be of different creed, race, nationality, or social status. The marriage may or may not receive family approval. The older method of using marriage for furthering family alliances had its great disadvantages, but it avoided most of the clash that comes from antagonisms based upon divergent backgrounds.

Finally, a word should perhaps be said concerning the modern social forces that operate to pull the family apart. Each member has his own friends, his own interests, his own diversions. Modern uses of leisure are different for each age level, and most of them require a leaving of the home premises. It is not surprising that family life has a tendency to disintegrate. The family automobile ride, the family picnic, the family vacation, and now the family television are forces that still bind members together, but there are not as many integrative as disintegrative forces operating upon the average family group.

Modern psychologists and sociologists have been studying homes in great detail in recent years. The main results of their researches have been to demonstrate the extreme importance of a child's home upon his personality, attitudes, reactions, and behavior. The remainder of this chapter will deal with the results of outstanding investigations into such topics as the classification of homes into types, the emotional interrelationships among the members, discipline in the home, special problems of maintaining a good home for adolescents, and the effect upon all concerned by various factors—size of family, absence of one parent, socioeconomic status, and so on.

Classification and Characteristics of Homes

When a stranger visits a home, he inevitably notices its characteristics more or less, depending upon his powers of observation, and, on the basis of what he has observed, draws his own conclusions as to familial affec-

tions and tensions Use of a rating scale for homes requires primarily a series of such observations as any visitor might make, except that the trained adults who study homes are more systematic, careful, and thorough than a casual visitor is likely to be

Within the past twenty years two especially important contributions to the understanding of family interrelationships have appeared One contains a rating scale of thirty items, by means of which one may characterize homes The other gives a classification of the patterns of authority and control within the home The present section will be concerned primarily with the presentation of results from these two studies

Patterns of Parental Behavior Although each pair of parents has its own individuality, the behavior of parents in general toward their offspring may be classified roughly into eight types,³ based upon different combinations of three main variables The first of these is the degree to which the parents accept the child They may reject him, accept him, or be casual or indifferent toward him The second variable concerns the extent of their indulgence and varies from subservience to his every whim to a nonchalant indifference to his needs The third is the pattern of authority within the family, which may vary from an autocratic issuing of commands by the parents to a family democracy in which everyone's vote is of equal value In theory there could be many possible combinations of these three variables, but actually there are only eight frequent configurations These will be described briefly

1 *Actively rejectant* parents are consistently hostile, unaffectionate, disapproving, critical, and distant They seek actively to dominate the child by means of autocratic commands Warm, social, trusting relations are missing The home is full of tension and conflict, and there is a feeling of resentment on both sides These parents dislike children, have no understanding of them, and rule them in a dictatorial manner They are not intentionally cruel and they do not physically mistreat their offspring They are cold, unsympathetic, and irritable toward those who are to them mainly a nuisance

2 *Nonchalant, rejectant* parents have the same basic dislike for and indifference toward the child, but instead of continually nagging at him, they are merely indifferent to what he does, as long as he does not bother them They ignore him as completely as possible and maintain only the slightest contact with him When, however, the child does get in their way, they become autocratic and hostile, so as to get the point at issue settled quickly and with as little inconvenience to themselves as possible

3 *Casually autocratic* parents neither accept the children with understanding nor reject them with resentment Some are more consistently autocratic than others All of them believe that a parent's authority is definitely above the desires of a child, but some of them are autocratic on principle, all day and every day, on

³ A L Baldwin, J Kalhorn, and F H Breeze, "Patterns of Parental Behavior," *Psychological Monographs*, Vol LVIII, no 3, 1945, 75 pp

matters large or small, whereas others try to maintain a friendly atmosphere, but resort to commands on important matters, merely from expediency. These autocratic-by-expediency parents have no theories about child training, so they react to each situation as it arises. They are likely to have no fixed policy about anything, and their home is usually on the chaotic side, with the children having a good deal of freedom and a moderate degree of affection, but meeting an autocratic handling if an issue is important enough.

4 *Casually indulgent* parents are mildly indulgent and in general tolerant, but rather haphazard. They maintain a fairly pleasant atmosphere in the home, and they often let the child do as he pleases, provided he does not bother them too much. They do not go out of their way to be indulgent, but they find that giving in is easier than resisting. They take their children easily, have no rigid standards for them, have no fixed policy about handling them, are often diverted from punishing them, and are inclined to baby them at times, although not consistently.

5 *Acceptant-indulgent* parents show a deep emotional attachment to the child, they are unduly anxious about him, they protect and baby him, they identify themselves so completely with him that they try to live their own lives over in his. They almost smother him with demonstrations of affection, and they put themselves to endless inconvenience in order to keep him happy. They do not, however, admit him as an equal who helps them make decisions. Their attachment to him is definitely neurotic and is so close that they cannot be objective about him or his problems. These parents have, however, definite standards for their child's behavior, although their method of procedure consists in leading him gently through their love for him rather than in coercing him.

6 *Acceptant-casual-indulgent* parents are sometimes just as indulgent as those in the above groups—although usually they are less extreme—but their indulgence is based on impulse, and they do not identify themselves with their child. They let their junior have almost unrestrained freedom, and they submit to a good deal of disobedience and bad manners on his part. They admit their child's shortcomings, but they think freedom is the best way to let him develop his capacities, even though it may be trying at times. Because they are basically casual in their relationship, they do not smother their child with affection, or seek to overprotect him, or try to make him conform to an ideal. They just let him run wild most of the time and give in to him when conflict arises, because it seems to them easier than opposition.

7 *Acceptant-indulgent-democratic* parents are basically indulgent and believe in treating children as their own equals in a family democracy. The children are allowed to criticize their parents, to express their own views, and to make decisions on most minor and some major issues. They are treated on the surface as if they were adults, but they are also subject to a good deal of parental pressure that is applied indirectly via the close bond between parent and child. The parents use democratic practices as a means of making their child into the ideal companion they want him to be. The home is child-centered and rests upon a neurotic degree of contact between parent and child, and a neurotic identification of the former with the latter.

8 *Acceptant-democratic* parents are emotionally mature people who believe in the participation of children in family decisions and the independence of the child as an individual. Some parents of this type purposely repress expressions of affection

and try to be objectively scientific in their treatment of their children. They are so afraid of influencing him too much that they often do not help him, even when he needs their aid to resolve a conflict. They make little or no effort to protect him from dangers of any kind. The more "scientific" parents do not act impulsively, but think matters over in view of basic educational principles and try to be rational. The child is respected as an individual, is encouraged to voice his opinions, is often consulted, and his decisions are allowed to stand without adult coercion. Children in such families often call their parents by their first names, an outward evidence of complete democracy. Parents and children meet on a companionable intellectual ground, but there is little overt affection between them. The child has his own place in the family council, and his desires are given whatever weight seems just in relation to the needs and wishes of the remaining members of the group.⁴

The chart in Figure 112 has been constructed to show the contrasts among these various home atmospheres. Since the figure would be more confusing than helpful if all types of parents were included, it has been limited to only three: the actively rejectant, the casually indulgent, and the acceptant-indulgent. As may be seen at once, the first and third types of parent score at the two extremes, while the casually indulgent scores nearly in the middle of the figure on most traits.

Effects of Parental Attitudes upon Children. A careful and experienced observer can make a shrewd guess about a child's parents from noticing his behavior when he is away from them, because the child reflects to some extent at least the environment in which he has lived and the treatment he has received. It should be understood, however, that there are individual variations in the reaction of children and adolescents to their homes and that the following remarks apply only in general when one summarizes results from a large number of cases.

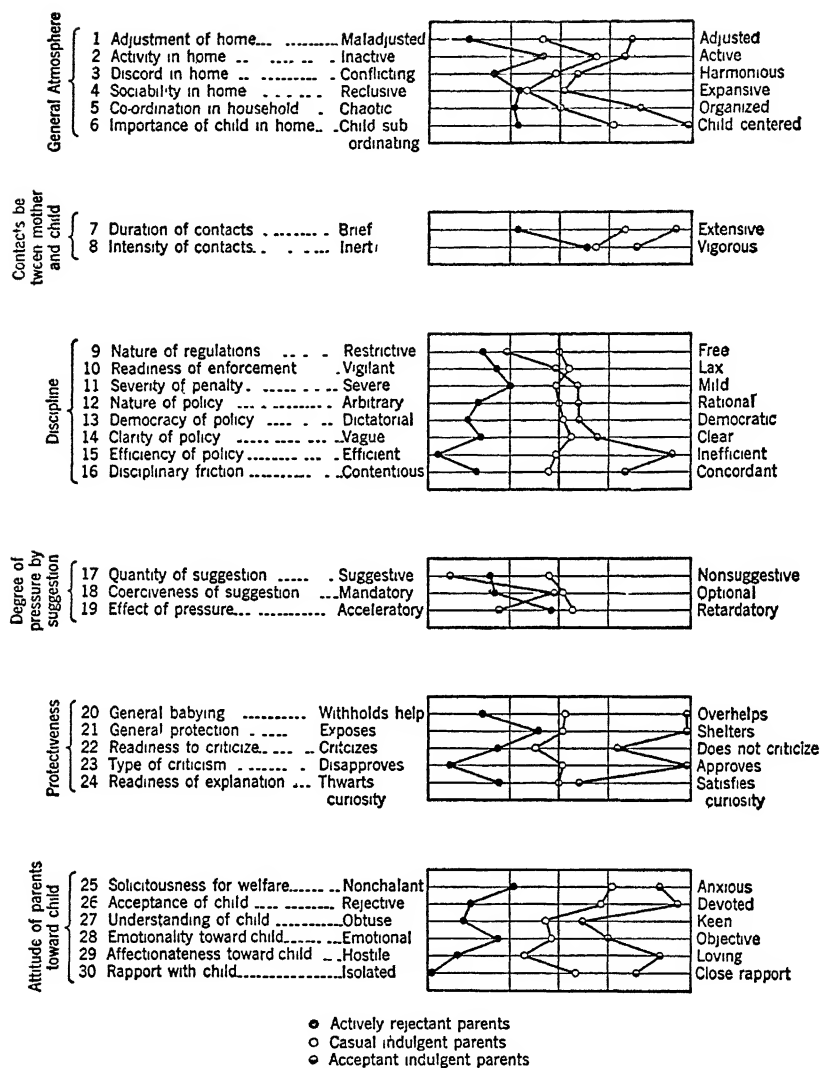
Thus the child who has been actively rejected by his parents is passive toward authority, docile, outwardly decorous—since only by such behavior can he escape their nagging and punishment—but he is also hostile, withdrawn, fearful, frustrated, insecure, stubborn, and passively resistant.⁵ He is hostile in response to his parents' hostility, withdrawn because his contacts have been reduced to a minimum, fearful with good reason, but stubborn and resistive, since only thus can he achieve a small assertion of his ego, a slight retaliation of hostility, and an inactive expression of resentment. In one interesting study of twenty-six children who had dominating parents, fifteen of the children were passive, submissive, and dependent, six were rebellious and resentful, and five were passively resistant.⁶

The child of nonchalant, rejectant parents shows a different picture. He does not have to fight against hostility but against indifference. He is a type of neglected

⁴ Condensed from Baldwin, Kalhorn, and Breeze, *loc cit*. Used by permission of the publishers.

⁵ L. R. Wolberg, "The Character Structure of the Rejected Child," *Nervous Child*, 3:74-88, 1944, and D. D. Mueller, "Paternal Domination: Its Influence on Child Guidance Results," *Smith College Studies in Social Work*, 15:184-215, 1945.

⁶ Mueller, "Paternal Domination: Its Influence on Child Guidance Results," *loc cit*.

Fig 112 *Parental Attitudes*

Based on A L Baldwin, J Kalhorn, and F H Breeze, "Patterns of Parental Behavior,"
Psychological Monographs, 58 19, 26, 43, 1945

child There is so little interaction between him and his parents that he can get their attention only by misbehaving. He has a moderate degree of independence, thrust upon him by parental refusal to help him. He makes desperate attempts to get attention, to arouse affection, and to achieve status. He soon discovers that he can obtain from age-mates the satisfactions that his parents deny him, and from then on he is likely to be in open conflict with his home.

Children whose parents maintain a neutral attitude but are at the same time autocratic in discipline are likely either to be nervous, timid, and compliant in their efforts to win recognition, or else to be aggressive and rebellious in order to assert their independence and individuality. If, in addition, the autocratic handling alternates with indifference—as is the case if treatment is based upon expediency and impulse—the children learn to be sly, to wriggle out of difficulties, to test the limits to which they can go, to bend temporarily before the storm, to delay requests until mother is in an amiable mood, and generally to circumvent a discipline that is of an uncertain and varying nature. If the casual parent is indulgent rather than autocratic, the less assertive child reacts by feeling insecure and anxious, by showing a tendency to be withdrawn when among other children, and by clinging silently to the fringe of groups without trying to take an active role. The aggressive child reacts to the same situation by running wild, by being destructive, and by thrusting himself into groups. Children of indifferent parents thus tend either to resign themselves to receiving little attention or else to become determined attention-getters.

The children of indulgent parents are likely to feel secure, protected, and comfortable. They soon learn to give an outer conformance to parental desires, at the same time getting their own way by being loving, cute, wheedling, disappointed, hurt, or amusing, as the occasion demands. Behind the façade of compliance and close attachment, however, they are domineering, self-centered, selfish, and determined to do as they please. Because they feel absolutely secure, they become smug, self-confident, somewhat self-righteous, and certain of their power over others. When they go to school, however, they discover that their age-mates are not so easily handled, and these overprotected children are usually unpopular. If they are smug enough to resist the shock, they become more aloof from others than before and more firmly entrenched in their own superiority. Success in meeting parental pressure intensifies the complacency of the accepted child into a precocity of mind, a maturity of outlook, a cocksureness of attitude, and an absolute belief in his own powers that makes him thoroughly obnoxious to everyone but his parents. Since, however, "democratic" parents tend to withhold open demonstrations of affection toward a child—lest they overprotect him—he is inevitably caught in a conflict: those who approve of him give him little warmth, and those from whom he might get affection either dislike or despise him. A vigorous child makes violent attempts to break out of his isolation. Since his democratic home treatment has taught him that he need fear no one, he is uninhibited, aggressive, and confident. As he grows older and develops understanding, his desire to be popular may lead him to try a more friendly means of approach. An extreme of democratic treatment may thus set up undesirable reactions.

Parents who are acceptant, moderately indulgent, democratic, and warmly affectionate have a home that is as near to satisfaction as can be expected, and their children are generally well balanced, secure, and happy. They may, however, be a little too comfortable within the family circle and reluctant to leave it, either actually or emotionally. They are sometimes too much exposed to pressure from siblings because their parents will not step in and protect them from aggression. Those who can come up to expectations, protect themselves, and adjust their desires to those of other people emerge as successes from this type of home.

Teachers in general tend to prefer as pupils those youngsters who come from homes in which the parents are dominant to those who come from homes in which the parents are submissive to their children's demands. Since teachers have twenty-five to forty children in a class, one can see the reason for this preference. The child with dominating parents is usually courteous, obedient, interested in school, modest, generous, responsible, docile, attentive, loyal, and careful. He accepts authority, keeps his desk in order, is careful of his clothes, has good manners, does not talk back when reproved, puts things back where he found them. Children from homes with submissive parents are rated by their teachers as being disobedient, irresponsible, disorderly, lazy, selfish, stubborn, sulky, aggressive, self-confident, talkative, independent, and antagonistic. They defy authority, are fussy about their food, lack interest in school, have bad manners, are often tardy, express themselves well and fluently, get on with their age-mates, and are general classroom nuisances. It should be noted that the two groups of children show both virtues and faults. One child is pleasant for a teacher to have around, but lacks initiative, he depends upon authority, he is hesitant in speech, and he has a better adjustment to older people than do his age-mates. The other child has the faults of irresponsibility, selfishness, and disobedience, but the virtues of independence, initiative, and fluent self-expression.

*Patterns of Authority in the Family*⁷ Since there are two parents, there can be only three general patterns, although subdivisions within each are possible. Authority may be in the hands of the father or of the mother, or it may be equally divided between them. In the investigation here reported, based upon an intensive analysis of thirty-seven homes, five main types were recognized: the mother-controlled, the mother-led, the father-controlled, the father-led, and the equal-controlled, of which there were four subtypes. These groupings are listed in Table 35. Brief descriptions are given below.

The mother-controlled family contains the *passive* husband so frequently referred to in discussions of the (supposedly) increasing number of matriarchal families in America. Characteristically, this husband is indifferent to his wife, he looks upon child rearing as a woman's responsibility, and he prefers men's companionship and masculine activities to the company of his wife and children. His wife controls the home and family, first, because he apparently delegates that responsibility to her while he earns the living or not, as the case may be, and second, because she apparently feels some compulsion or need to assume the dominant role in family control.⁸

⁷ Based upon H. L. Ingersoll, "A Study of Transmission of Authority Patterns in the Family," *Genetic Psychology Monographs*, 38:225-302, 1948.

⁸ The quotations are condensed from pp. 287-293 of Ingersoll, *loc. cit.* They are used by permission of the publisher.

Table 35 TYPES OF PARENTAL CONTROL

A	Mother-controlled, autocratic	4	}	9	
B	Mother-led, democratic	5			
C	Balanced				
1	Equalitarian, democratic	7	}	13	
2	Equalitarian, indulgent	2			
3	Equalitarian, neglectful	2			
4	Equalitarian, inconsistent	2			
D.	Father-led				
1	Autocratic	2	}	15	
2	Democratic	7			
E	Father-controlled, autocratic	3	}		
1	Pseudo father-controlled	3			

From H. L. Ingersoll, "A Study of Transmission of Authority Patterns in the Family," *Genetic Psychology Monographs*, 38 239, 1949. Used by permission of the publishers.

In the mother-led family the decisions regarding family policy are jointly made, but with the wife assuming the lead. She is apparently recognized as the stronger, more capable person of the partnership, and her leadership appears to be accepted without resentment on the husband's part. There is warmth and affection in this family. The husband tends to be less secure emotionally, and thus to need more affection than his wife.

The partners in a democratic marriage have worked out a complex but unified system of authority based on a common philosophy of family life. This philosophy becomes so much a part of their thinking about the family that one partner often knows without asking what the other's reaction will be to a proposal. Therefore, authority over the various spheres of home and family life in the equalitarian family, for the most part, becomes a joint activity except in areas where one partner is felt more capable of judgment than the other. The husband and wife of the equalitarian marriage express their flexibility in adjustment in a variety of ways. Both have developed successful techniques of resolving conflicts, although the techniques used vary from sharp quarrels that are soon over to various means of avoiding a conflict when one partner is irritable, or withdrawing a point when it seems not worth the cost. The use of humor and "kidding the other out" of his peevishness are more common in this authority pattern than in the others.

In the father-led family the father is definitely the head of the family. Although family policy is apparently unified and arrived at through agreement of both husband and wife, the husband's leadership is more often followed in family planning and decision making than is his wife's, although she manages the home and family, including the rearing of the children, to conform with joint family policy and with his expectations. His authority supports her discipline consistently and firmly. Occasionally he may "lay down the law" or become autocratic in his control but for the most part he is the respected and loved democratic husband and father.

In the father-controlled family the husband expects to be absolute master of the home. He sets the family policy and makes the major plans and decisions. His

unpredictable temper is his keenest and most feared weapon in maintaining control over his wife and children. He is likely to set standards of behavior for his children that are beyond their abilities to achieve. He expects his wife to see that his children are brought up to suit him. He criticizes her when they are not a credit to him. He takes the attitude that he is a superior being and his wife is inferior. He goes about in some mixed crowds but prefers men's company and masculine sports and activities. Wife and children are almost compelled to share his interests. Conflicts between him and his wife are often unresolved. He insists on having his way. If his wife tries to gain some concession, she is only ignored, berated sarcastically, or overrun. She is forced to make all the adjustments in order to keep the marriage intact. There is little or no affection expressed toward each other by either of the partners.

The reaction of the children could be prophesied from the family situation. In the mother-controlled homes they are erratic in maturing, some showing parental "fixations," some rebelling against or withdrawing from parental authority, and others escaping from the family group as rapidly as possible. Generally speaking, these children show symptoms of disturbance in personality adjustment.

When the mother is a leader but not a despot the children appear to be more attached to her than to their father. They respect, admire, and love her, but like their father also. The children confide in their parents. The general family atmosphere is warm and acceptant. The husband and wife who are equalitarian in their relationship to each other tend to guide their children from early dependency to a place of responsibility and individuality in the family group. These children learn how to co-operate, how to share in family crises, how to contribute to family planning, and how to use so-called democratic techniques in group living. They are encouraged to become self-reliant and independent of parents as they approach adulthood.

Children in a father-led home often feel that their punishment is unfair and unnecessarily strict. The authoritarian father loses the confidence of his children, especially during adolescence. They may rebel, withdraw, or become overdependent. He may tie them to himself by his overprotection or force them to premature independence in order to escape his domination. Since the father in the father-controlled home is autocratic, erratic, and unpredictable, he is not loved. He sets up adult standards for his children that suit his ends and represses them into docile submission. He discourages adolescent independence, and is disapproving of his children's association with the opposite sex. He apparently hopes to run their lives as long as he can.

The two extreme types and a typical equalitarian pattern are described below in the words of students who wrote statements concerning their own families.

My mother is the one who tells us what to do and the one we go to for the answers. My mother is the recognized head of the family. The house we live in belongs to my grandfather, but my mother drew up the designs for it and planned the furniture. Dad has had very little to say about any of it. It is Mother's money that we spend. Now that Dad is home he pays her for his room and board,

and she is the one who keeps the accounts, figures the income tax, and hands out the money

We all have such a good time together! Arguments and disagreements occur, but are easily patched up. Everyone helps with jobs, and there seems to be a unity in which everyone is pulling together for a common goal. We are all very honest with each other, and everyone can take criticism.

Our family has always been subordinated to my father's needs and desires. He would do anything for us if it didn't interfere with *his* plans. He is still a little boy. He has to have everything his own way. Mother does the adjusting. She sometimes tries to reason with him, but it doesn't do any good. He decided where we were to live, selected the house furnishings, planned our vacations, decided when and whom we should entertain, and to some extent decided upon our vocations. He always expects too much of my mother, and she almost had a nervous breakdown trying to live up to his expectations.⁹

Factors Affecting the Impact of the Home upon the Child and Adolescent The "normal" home contains two parents, their children, and no one else. If the home is broken by the absence of a parent, whether through death, divorce, or desertion, the home has a different character. If the number of children is unusually large or small, the family customs and relationships show differences. If there are conflict and tension in the group, such as arise when one child is jealous of another or when the parents quarrel frequently, the children are affected. The nature of the discipline in the home is of importance in a child's development. So also is the economic level of his home and its social status. The effects of variation from "normal" in these matters are of considerable importance in conditioning the behavior of adolescents, especially in influencing the nature and course of their emancipation from home control.

The broken home exists everywhere, even without divorce. One parent may have died, deserted his family, or been put into an institution. Among 4,400 high school seniors in one state in 1953, 20 per cent of the homes were broken—11 per cent by the death of one parent, 7 per cent by divorce, and 2 per cent by separation.¹⁰ The boys and girls from the broken homes had appreciably more problems than their classmates from complete homes. They were under more tensions, and their adjustment was poorer. High school students from broken homes do poorer schoolwork and rate lower on personality scales than do those who come from complete families. Even when one equates pairs of boys for intelligence, in each pair the adolescent from the broken home has more social and emotional problems than the

⁹ These paragraphs are quoted from Ingersoll, "A Study of Transmission of Authority Patterns in the Family," *loc cit*, pp. 246, 254, and 274, by permission of the publisher.

¹⁰ E. W. Burgess, "Economic, Cultural, and Social Factors in Family Breakdown," *American Journal of Orthopsychiatry*, 24:462-470, 1954. P. H. Landis, "The Broken Home in Teen-Age Adjustment," *Washington Agricultural Experiment Station Bulletin*, no. 542, 1953, 33 pp.

other boy¹¹ He is quicker to anger, more self-centered, less sensitive to social approval, less able to control himself, and more easily discouraged when things go wrong Many of the boys studied in this investigation entered the Army, and some of them were discharged as being maladjusted to Army requirements, all the dismissals in this group came from broken homes Investigation of 211 hospitalized neurotic soldiers showed that 36 per cent came from broken homes. Since this number is over three times the corresponding percentage in the general population, it is clear that these homes are producing a disproportionate number of those with personalities that break down under strain¹²

The size of the family has an effect upon the adjustment of the children, but there seems to be some disagreement as to just what the effect is, especially in the case of the large family¹³ Some authorities report greater security in the large family, and some report less It seems a priori reasonable to suppose that the members of large families would almost automatically acquire simple social skills, and perhaps this would be the case if one studied large and small families from the same social background Often, however, the large family occurs at the lower end of the social scale and is therefore subject to privations that do not affect smaller families in the upper income brackets One report characterizes adolescents from large families as receiving less than normal support in their problems, as being less able to continue with their education, as receiving less aid of any kind from their parents, as being less well adjusted, especially the girls, among whom there was a disproportionate number of adolescents with inadequate social life¹⁴ Another study characterizes the youngest child as feeling unable to compete with the others and the oldest as feeling neglected¹⁵ It may still be that a large and economically adequate family is a better social unit than a small one, especially as it is more likely to preserve family rituals and traditions—such as hanging up Christmas stockings, going to church together, walking in a park on Sunday, wishing on the wishbone, and so on—all of which customs lead to an integration of family life.¹⁶ When a

¹¹ R. Torrance, "The Influence of Broken Homes on Adolescent Adjustment," *Journal of Educational Sociology*, 18 359-364, 1945

¹² L. Madow and S. E. Hardy, "Incidents and Analysis of Broken Families in the Background of Neurosis," *American Journal of Orthopsychiatry*, 17 521-528, 1947

¹³ J. H. S. Bossard and E. S. Boll, "Security in the Large Family," *Mental Hygiene*, 38 529-544, 1954, P. H. Landis, "Teen-Age Adjustment in Large and Small Families," *Washington Agricultural Experiment Station Bulletin*, no. 549, 1954, 23 pp., C. P. Loomis, W. B. Baker, and C. Proctor, "The Size of Family as Related to Social Success of Children," *Sociometry*, 12 313-320, 1949

¹⁴ Landis, "The Broken Home in Teen-Age Adjustment," *op cit*

¹⁵ P. Schmidt, "Über die Stellung in der Geschwisterreihe," *Heilpädagogisches Werkbuch*, 23 149-156, 1954

¹⁶ J. H. S. Bossard and E. S. Boll, "Ritual in Family Living," *American Sociological Review*, 14 463-469, 1949

family begins to deteriorate it loses its traditions, which are often unimportant in themselves but serve as the cement that holds the members together

At the other end of the distribution in respect to size of family is the only child. He is automatically deprived of constant contact with other children and he is continually subjected to adult presence, adult ways of life, and adult conversation. It is not necessary for an only child to be maladjusted, but it is easy for him to become so. For one thing, his mother has enough time to baby and spoil him, if she wants to. For another, he is not forced to overcome jealousy of his siblings and to content himself with his fair share of his mother's attention, and, if he is a boy, he comes into sharp and direct rivalry with his father for his mother's affection. If his parents quarrel, the only child has little if any protection from the resulting emotional atmosphere, even when the quarrel has nothing to do with him. On the other hand, an only child usually matures faster in social, emotional, and intellectual reactions than a member of a large family.

There is certainly a tendency for only children to be overprotected, that is, they receive too much maternal attention and companionship, they are abnormally protected from the ordinary hazards of childhood, they receive constant indulgence of their desires and such an outpouring of maternal love as to isolate them from other influences. The mother in these instances is usually not an abnormal person and shows no abnormal drives, she merely displays too much ordinary maternal behavior, too intensively and over too long a period. The danger of this development is greater if the child is a boy, if the father is ineffectual as a person, if the child is sick a great deal in infancy, if he is not merely the only child but the only possible one, or if he was born or adopted toward the end of the mother's years of possible childbearing.¹⁷ The "only" child who is overprotected is sure to have difficulties in school, since neither his teacher nor his age-mates are going to give him the treatment he receives at home. If he rejects his peers and they reject him, he becomes more tightly tied than ever to his mother, if he tries to win status among them, he is soon in conflict with her. One of the relatively late evidences of overdependency is the chronic homesickness of a few college freshmen each year.¹⁸ Some cannot survive the separation, and others do so only with difficulty. One hears more about homesick girls at the college level, probably because boys regard the attitude as unmanly and therefore repress the symptoms if they can or assign some other explanation to them, but in boarding schools both boys and girls are homesick and show it.

¹⁷ Harry Bakwin, "Pure Maternal Overprotection," *Journal of Pediatrics*, 33 788-795, 1949.

¹⁸ A. A. Rose, "The Homes of Homesick Girls," *Journal of Child Psychiatry*, 1 181-189, 1948, and "A Study of Homesickness in College Freshmen," *Journal of Social Psychology*, 26 185-203, 1945.

The two mothers described below show in the genesis of maternal overprotection the difference between the "pure" and the "compulsive" types

Nancy is at the present time the curse of a young kindergartner, who came to one of the writers for assistance in dealing with the child. Nancy, aged six, wants all the teacher's attention, all the teacher's time, all the teacher's affection—and she raises merry Cain when she cannot get them. The basis for the behavior was not hard to find. Nancy is the only child of a very young, pretty, rather stupid, socially isolated widow, who has no interest in anything but her small home and her small daughter. The mother's behavior bears out her assertion that she does not miss her husband and rarely even thinks of him. She has an independent income, and her husband's absence seems to mean to her only that the child is entirely hers. The home is meticulously neat. Everything in it is arranged for Nancy's comfort. Mother and daughter have never been separated for more than an hour or two since Nancy's birth. When Mrs. M. gets a permanent, Nancy goes along and gets one also, when Mrs. M. goes to the market, Nancy accompanies her and makes most of the selections. The child has rarely played with other children, partly because the mother had no friends and partly because the two were completely absorbed in each other. So far as could be determined, Mrs. M. is not overcompensating for any underlying guilt and is not an abnormal person. She merely prefers her daughter's company to anyone else's. No compulsion or phobia could be detected. The relationship is normal, but there is too much of it. Mrs. M. is willing to co-operate with the school in helping Nancy learn how to get along with her age-mates. She sees that she has unwittingly spoiled the child and wants to repair the damage. It is probable that she and the teacher can gradually accustom Nancy to being part of the chorus instead of constantly playing the leading role. Mrs. M. was urged to join some women's groups—Red Cross, Women's Volunteers, Grey Ladies, or whatever interested her—and to find work that would fill her empty days and would help prevent too great a centering of attention upon Nancy. It would appear that Mrs. M. was showing pure maternal overprotection, largely as a result of having nothing on her mind but her child and nothing to do except to be with her and amuse her.

In contrast to Mrs. M. was another widowed mother of an only child, in this case a boy of seven who had several times wandered away or run away from home—no one was quite sure which. Mrs. B. was emphatic that little Teddy had wandered off because, while he was a darling child, he was not very bright. After the police had found and returned him for the fifth time, a social worker was sent to the home to make inquiries. She took the precaution of visiting Teddy's school first and there discovered that he had never been absent from school and that he had earned an IQ of 142 on a Binet test that had been given him because his teacher thought he seemed too mature for first-grade work but too insecure for advancement.

The mother seemed on the surface to be quite co-operative, but she soon began to complain about how the child tied her down and prevented her from enjoying life. On the other hand, she was very anxious that he should be a credit to her. Sympathetic questioning brought out the fact that she had not wanted to have

children, that she had always been frigid, and that she resented the child's being a boy. After her husband's death, she had had a series of gentlemen friends, one or more of whom would have married her had she not been burdened by a child. She still often had to turn down invitations because there was no one to leave him with.

Warring with her desire to enjoy herself while she was still young was a stern sense of her duty toward Teddy. She had been carefully brought up by a meticulous but emotionally cold mother to believe that any natural mother loved her children, and she could not face the fact that she disliked hers. As a result, she was in conflict with herself and was unable to give the boy any security.

Her attitude toward him swung from one extreme to the other. At times she simply dumped him on a neighbor and went off for an evening with one of her friends, but she was so conscience-stricken by her neglect that for days she smothered Teddy with affection. In general, she overprotected him in a compulsive way as a means of protecting herself against the inner voice of conscience. The results upon the child were much the same, except that he had to face occasional short periods of neglect and open rejection in favor of someone else. He ran away, not during his mother's absence but just after her return. The response seemed composed of a desire to punish his mother for her neglect and of a true revulsion to the gushing affection with which she felt compelled to assuage her own feelings of guilt.

There is less prospect of an early modification of behavior by Mrs. B. than by Mrs. M. of the previous study, because this overprotection of the child is a form of obsession which serves as a buffer between the mother and a conflict of desires. After she has spent a few days in smothering her son with an outpouring of mother love, *she* feels better. Her chief concern is to protect her own ego, whereas Mrs. M. had no such need to protect hers. To judge from the running away to date, Teddy will eventually solve his problems by rejecting his home and leaning upon his friends for security, but in the meantime there are sure to be many periods of difficulty. Incidentally, with each experience of rejection, Mrs. B. is making it harder for Teddy to accept a stepfather, if he should ever have one.

Naturally, not all overprotective mothers have only one child, but the existence of only one presents a situation in which this attitude easily arises. The mother of five children is too busy to have much time or attention for concentration upon a single child, although she may be quite uneven in her treatment of the five. It is, however, the young widowed mother with one child who is in the greatest danger of becoming overprotective.

Common Attitudes of Parents toward Adolescents From the many studies of parental attitudes the writers have selected a few as samples.

The emotional interrelations within the family are of the utmost importance in affecting a child's development. A series of questions answered by five hundred college girls gives a view of the variation that one can normally expect. The girls testified to the following relationships within their homes:

- I. Attitudes of parents to each other: deep love, 29 per cent, strong love, 26, moderate love, 19, little love between them, 12, no love or active dislike, 11, no answer to question, 3.

II Attitudes of parents toward daughters

- A Mother loved her dearly, 64 per cent, loved her a good deal, 25, loved her some, 7, loved her little or none, 3, no answer, 1
- B Father loved her dearly, 54 per cent, a great deal, 28, some, 8, little or none, 8, no answer, 2

III Attitudes of daughters toward parents

- A Toward mother loved her greatly, 75 per cent, loved her some, 24, no answer, 1, hated her sometimes, 48 per cent
- B Toward father loved him dearly, 59 per cent, loved him more or less, 35, loved him none, 3, no answer, 3, hated him sometimes, 45 per cent

IV Conflicts between daughters and parents

- A With mother no conflicts, 25 per cent, few conflicts, 41, some, 17, many, 16, no answer, 1
- B With father no conflicts, 39 per cent, few, 33, some, 13, many, 13, no answer, 2¹⁹

This summary may be taken as the normal variation in interpersonal relationships within homes of the upper social and economic levels. The degree of friction and rejection is not excessive.

The relationship between adolescents and their parents is more likely to be good than poor, although the overwhelming amount of literature on maladjustment easily leads to the opposite opinion. Happy, normal, contented families have little news value and are not often investigated, except as "control" groups. Thus, among nearly two thousand high school pupils who were queried about home conditions, nearly two thirds had no criticism.²⁰ Possibly they were too immature, too cowed, or too stupid to give any, but it seems more probable that they were happy and well adjusted in their home life. Those who had criticisms—32 per cent of the boys and 39 per cent of the girls—complained that their parents gave them too many instructions, criticized them, nagged them, asked them too many questions, interrupted them, quarreled with them, required them to get home from parties at too early an hour, were stingy with money, embarrassed them by bad manners, or showed such traits as partiality, sarcasm, or worry over nothing. The parents, on the other hand, complained mainly that their adolescent children were disobedient, impertinent, lazy, and untidy.

One study which reports the contrasting attitudes of mothers of maladjusted and well-adjusted adolescent girls gives some insight into some forms of parental attitude. It is perhaps not quite clear whether the maternal attitude contributed to the maladjustment of the daughter, or if the daughter's maladjustment contributed to the difficulties of the mother.¹

¹⁹ A. Ellis, "Love and Family Relationships of American College Girls," *American Journal of Sociology*, 55 550-558, 1950.

²⁰ L. H. Stott, "Adolescent Dislikes Regarding Parental Behavior and Their Significance," *Journal of Genetic Psychology*, 57 393-414, 1940, and "Home Punishment of Adolescents," *Journal of Genetic Psychology*, 57 415-428, 1940.

<i>Characteristics of Mother in First Group</i>	<i>Characteristics of Mother in Second Group</i>
1 Mother neurotically attached to daughter	1 Mother delighted at each evidence of daughter's increasing maturity
2 Mother either overcontrols daughter or allows her complete freedom from control	2 Mother has many interests outside of home
3 Mother unhappy in home life	3 Mother accepts her daughter's failures or idiosyncrasies without emotional reaction
4 Mother unable to talk freely with daughter, either because she has built up a pattern of infallibility or because she has been unable to control daughter	4 Mother can communicate freely with daughter in a friendly fashion
5 Mother disturbed by a sense of guilt in contributing to daughter's maladjustment	5 Mother's discipline has been fairly firm and always consistent, but has been based upon discussion with and understanding of daughter, and has been reasonable ²¹

The first picture is of a mother who is unhappy herself and does not know how to bring up her child; the only approach she has is through blind love, which stimulates her either to overprotect her daughter or to allow the girl to do whatever she likes. The second picture is of a mother who is an adjusted person with many interests, who maintains a friendly but not neurotic attachment to her child.

Another study, which relates mainly to fathers, reports attitudes of middle-class men toward the problems of child rearing.²² These fathers were inclined to be suspicious of "modern" innovations and viewpoints, and had reacted negatively to them. They also were inclined to overemphasize their own role as male parent and to bend their children so as to fit their position rather than to modify their role to fit the children's needs. They also expected rather too much of their sons and not enough of their daughters, and were inclined to leave their daughters' training wholly to the mothers.

Such reports as those just cited leave one with the uncomfortable feeling that perhaps there ought not to be any parents! It is comforting to find an article in which some attention is paid to them. One sentence from this article might well be quoted: "Previous work with parents of adolescents has been motivated by a desire to influence parents in ways that will serve the child's needs without enough consideration being given to the develop-

²¹ N. P. Handford, "Mothers of Adolescent Girls," *Smith College Studies in Social Work*, 24:9-34, 1954.

²² D. F. Aberle and K. D. Naegle, "Middle Class Fathers' Occupational Role and Attitudes toward Children," *American Journal of Orthopsychiatry*, 22:366-378, 1952.

mental needs of the parents themselves"²³ It is quite possible that parents are people, too, and that the children should sometimes be asked to compromise

There is no dearth of papers upon the matter of conflicts between the generations. Probably some amount of conflict is inevitable, merely because two—and sometimes, three—generations are bound together within a family. Three studies will suffice to point out the main areas of conflict. One

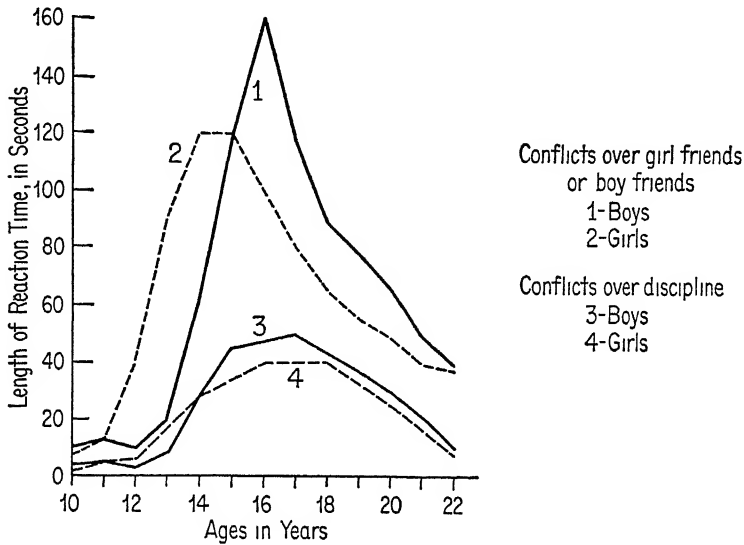


Fig 113 *Conflicts between Parents and Adolescents*

Based on M. Powell, "Age and Sex Differences in the Degree of Conflict within Certain Areas of Personal Adjustment," *Psychological Monographs*, Vol. LXIX, No. 387, 1955

report gives figures by age, as shown in Figure 113. The period of greatest conflict came when the children were between thirteen and sixteen years old, that is, during the years of beginning emancipation from parental control. These ages coincide also with the first years in high school. The main area of conflict was over friendships with members of the opposite sex, in addition, there was some difficulty over discipline. Conflicts began earlier for the girls than for the boys, presumably because the former develop heterosexual interests earlier than the latter. It is surprising that such difficulties should still continue into early adulthood.

A second study not only shows the nature of the conflicts between parents and adolescents but also relates the number to the type of home,

²³ R. M. Butler, "Mothers' Attitudes toward Social Development of Adolescence," Pts I and II, *Social Casework*, 34 219-225 and 280-287, 1956

of which 38 were democratic, 41 were intermediate between the two extremes, and 51 were authoritarian. On only a few items was there any real difference between boys and girls as regards the number of conflicts. In all types of home, there was less trouble between parents and daughters about schoolwork than between parents and sons, and in the authoritarian home the daughters had more quarrels than did the sons over friends and attitudes toward parents. It can be seen at once that the number of con-

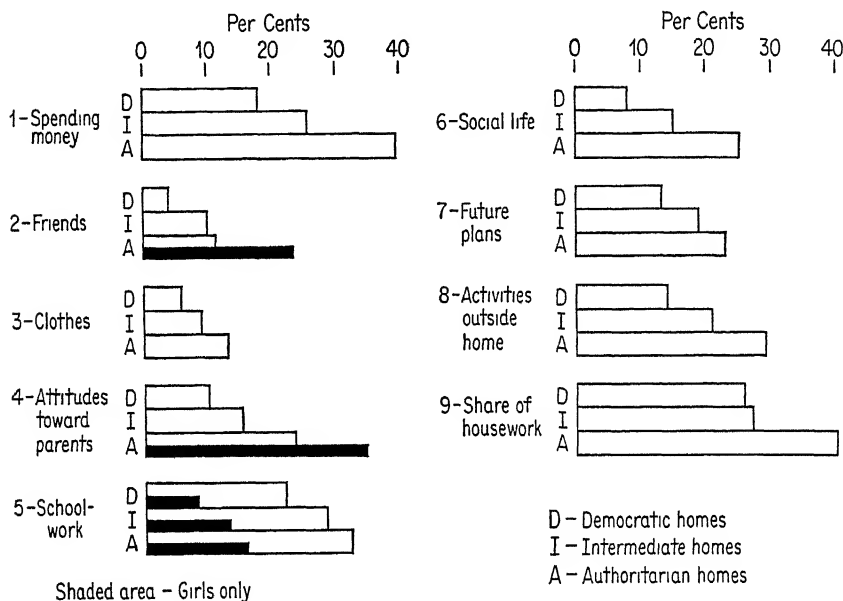


Fig. 114 Conflicts in Different Types of Homes

Based on figures in P. H. Landis, "The Ordering and Forbidding Techniques and Teen-Age Adjustment," *School and Society*, 80: 105-106, 1954.

licts is related directly to the type of home, but there were some in all types—as is probably inevitable when people of different generations live together. The results are summarized in Figure 114.

The third study gives some miscellaneous information about the conflicts between college students and their parents.²⁴ It involved one thousand students and was carried on by means of check lists and questionnaires, plus follow-up interviews with 20 per cent of the cases. The areas of difficulty are reflected in the list presented in Table 36. The students' grievances

²⁴ R. E. Lloyd, "Parent-Youth Conflicts of College Students," *Sociology and Social Research*, 38: 227-230, 1952. See also R. Conner, T. B. Johannes, and J. Walters, "Parent-Adolescent Relationships I: Parent-Adolescent Conflicts," *Journal of Home Economics*, 46: 183-186, 1954.

seem to spread over a good deal of territory and suggest that these young people have not managed to achieve any real independence from their families. It is probable that at the college level most direct criticism from parents will be interpreted as interference, no matter how well meant.

Table 36 LIST OF CONFLICTS BETWEEN COLLEGE STUDENTS AND THEIR PARENTS

Resenting parental interference with social life	22%
Resenting having no part in family planning	29
Resenting inadequate financial assistance	69
Resenting interference with academic work	20
Resenting familial criticism of school grades	35
Resenting slights and mistreatment (nature unspecified)	48
Resenting failure of parents to give them sex information	42
Resenting criticism of their friends	30

One hears and reads less now about home discipline than formerly, since the present idea is to be as permissive as possible. However, some form of control of children and adolescents by parents is necessary. If it can be effected without the younger generation realizing that control is there, so much the better. The situation has probably improved a good deal since the "good old days," but one still finds three types of home discipline that are basically dangerous to good mental health: the control by domination, the lack of any discipline beyond that which arises from temporary annoyance, and an unpredictable—to the children—variation between extreme severity and extreme leniency. The first type produces either shy, insecure children or overbold, insecure ones—depending upon how much vitality they have to fight back with—and is certain to precipitate severe storms during adolescence. The second type produces either a child who can manage himself or one that can manage his parents. In the former case, he has acquired independence at the cost of considerable strain. Adolescence in a permissive home is likely to be relatively free of disciplinary difficulties (although there may be other kinds), but in a child-dominated home the emancipation is far from simple, because the adolescent who has dominated his parents practically ever since his birth has never learned much about self-control. The third case, that of alternating control and neglect, combines the disadvantages of both and has the advantages of neither. The adolescent has not been able to develop either security or self-confidence, and his childhood uncertainties pursue him into adolescence, if not longer.

Good Homes for Adolescents

In spite of all the criticisms that have been leveled against the home, the writers feel quite sure that most homes furnish a background in which

a boy or girl may develop normally. That there will be occasional friction is to be expected, but if the feeling of security is present, both parents and adolescents can weather a few differences of opinion. One of the writers watched with interest some years ago the working out of a family conflict between a strong-minded small girl who would not eat enough and her parents. After two or three years of "tying everything" in order to get enough food into the child, the parents finally lit upon the following plan: the child was to tell her father exactly what to serve her at each meal, and he was to put upon her plate only what she told him to put there, but, having made her selection, she must then eat everything on her plate, without comment and without protest. This arrangement resulted in the child's eating less than her parents thought she should but appreciably more than she had ever eaten before—and there was peace at the dinner table. This kind of co-operative mixture of parental discipline and self-discipline is coming more and more into style in American homes, with resulting benefits to everyone in the family.

For adolescents the first trait of the good home is that it is willing to release gradually the control by the parents, but this release cannot be carried out without disaster unless children have been prepared for it in the preadolescent years. Emancipation has to take place and will take place, either peacefully or otherwise. The parental share of this operation is an acceptance of the basic fact.

There are numerous ways in which an adolescent may gradually achieve the necessary freedom from parental attachments. For instance, there is the matter of handling money. As children approach adolescence it is highly desirable that their allowance be increased so that they may buy independently a large proportion of what they need. Naturally they will buy some things inappropriate for their age, they will use up their allowance before the week is over, and they will buy things they do not really want. However, they will never learn to spend money wisely and appropriately by any other method than by actually spending it. If parents do not make some such arrangement as that suggested above, they encourage their adolescent sons and daughters to ask or tease for money, exactly as if these near adults were children. Such a situation not only prolongs childishness but may eventually bring on real revolt.

Dan, a young man of twenty-seven, is the despair of his parents because he seems unable to realize the value of money. Dan's family is quite wealthy. His mother has been a semi-invalid ever since his birth—he is the youngest of four children—and she has left his care to nursemaids, governesses, teachers in day schools, counselors in summer camps, and to housemasters and teachers in boarding school and college. During his childhood and early adolescence, whatever he wanted was procured for him. He constantly saw his parents charging things, and as he grew older he simply used their accounts in various stores. At the boarding school

he attended, the boys were supposed to be given only two dollars a week for spending money, but Dan's parents usually sent him five dollars or ten dollars, although the headmaster asked them several times to observe the limit more conscientiously. When Dan was sixteen, his father opened a cash account for him. There followed four or five years of constant difficulty because Dan overdraw his account almost every month. He did not intend to write bad checks, but he was unwilling to keep track of what he spent. When Dan was nineteen, he went into the Army, where he remained for two years as a private. He was constantly in monetary difficulties of one sort or another, and on a few occasions spent time in the guardhouse because he had failed to pay the bills he owed to the local merchants. Dan was kept in the United States as a clerk because he seemed too irresponsible for active service. When he developed fallen arches the Army was quite willing to let him go back into civilian life. At twenty-five he came into an inheritance from his grandfather. Dan's habits are not in the least wicked but they are expensive, and he has each year spent a good deal more than his income. His capital is therefore decreasing at an alarming rate. The endowment is enough to last, with moderate care, for his entire lifetime, but at the present rate it will be used up by the time he is forty. His parents worry constantly, partly because they do not like to see Dan remain so childish and partly because they feel some concern over leaving him a fourth of their own wealth. The older brother and the two sisters have shown no tendency to irresponsibility. The parents have about decided to put Dan's portion into a trust fund, of which he will be allowed to spend only the income.

In contrast, one of the writers is reminded of her own training in the proper handling of money. One of her earliest memories is of the Sunday morning ceremony of being given three new, shiny pennies for each week's allowance. One she put at once into the bank, one she put upon the collection plate in church, and the third was hers to spend as she liked. In the course of time, the amount was raised to five cents, then ten, twenty-five, and fifty cents, and eventually to one dollar and two dollars. With each advance, however, the contributions to bank and church were raised correspondingly. Also, as the amount of the allowance increased so did the number of things it was supposed to cover. There were three rigid rules about this allowance: first, no more money was forthcoming when it was gone, on many a cold winter's morning she tramped two miles to school through the snow because she had spent her allowance and had nothing left for carfare. The only way of adding to the amount was to earn small sums by doing whatever errands or other work could be found in the neighborhood. Second, there was no adult interference in the spending of the "free" portion of the allowance, nor were the more silly and childish uses of it belittled or commented upon. Third, items that were supposed to come out of the allowance were not forthcoming from any other source. If she did not buy toilet soap for herself, she did not borrow someone else's or raid the family supply, she washed with Fels-Naphtha from the kitchen. Such systematic and eminently fair training results in the establishment of habits that last a lifetime.

Insofar as it is possible, a good home allows an adolescent boy or girl to get himself out of his own difficulties. Thus if a boy gets into a row with

one of his teachers, he should not be allowed to run away from the situation while his parents see the teacher and patch up the trouble. If a girl buys a dress and then suddenly decides it is not suitable, she should return the dress to the store and do the necessary explaining herself, if the store will not take the dress back, then she should not be given money to buy another. If a girl has offended some acquaintance she may, of course, be given advice about what to do, but she should certainly carry out the advice independently. If a boy insists upon taking an extra course in school, he should not be allowed to drop out of it as soon as he thinks himself overworked. If a boy wants to ask a girl to a dance he should ask her himself—not get some member of the family to do it for him. The first impulse of an adolescent who gets into difficulty is to follow a childish pattern of behavior and run at once to a sympathetic adult who, he hopes, will straighten out matters for him. Most adolescents are not resourceful and therefore need advice, but they should never be allowed to dodge the outcome of their own bad judgment. The sooner they learn that the tail goes with the hide, the better. Parents and teachers both need to learn how to stand aside and let adolescents make mistakes, and then see to it that the youngsters profit by their errors. Protection from experience does not educate, it only prolongs childishness.

A good home for adolescents permits them to choose more and more of their own friends until the matter is entirely in their hands. Naturally, guidance is needed at first, and if it is unobtrusive, the adolescent will welcome it. It is inevitable that a boy or girl will make some unwise choices of friends, but no serious harm is likely to be done if the parents accept the friend, ask him or her to the house, and do not get into a panic. The danger arises when parents become uncompromising and drive their adolescent son or daughter out of the house, to meet the undesirable friend in some unprotected place. Successful parents use unwise friendships as education for their child in the judgment of character.

It might be mentioned in passing that one of the commonest sources of difficulty between parents and their adolescent sons is the temporary infatuation of the lad for some girl from an unsatisfactory and even vulgar background. Such an episode is part of almost every adolescent boy's experience. He selects such a girl largely because he is socially too immature for those in his own social group, and she does not hold him to standards that are so high they make him uncomfortable. Such a relationship usually does no harm, and if the boy comes from a good home, he will soon be repelled by the girl's lack of refinement—provided the parents do not make an issue of the matter.

As a final step in encouraging emancipation, the parents in a good home leave their boy or girl free to find a mate. If, since the beginning of adolescence, there has been opportunity for adequate social relations with

numerous members of the opposite sex, the adolescent has probably already gone through a series of temporary attachments and has educated himself sufficiently to know what he wants. Even though the final attachment leading to marriage may not find favor with the parents, the latter are likely to produce only revolt and estrangement by opposition. Parents can prevent many tragedies if, in their children's early years of adolescence, they arrange for an abundance of social contacts for their children. When permanent attachments are made, the time for parental control has already gone by.

Parental Adjustment to Society In a good home the parents do not pass their own maladjustments on to their children. Presumably no parents intend to, but some of them do. The difficulty may be seen in its simplest form in the immigrant home, in which the parents are trying to maintain their native customs in the face of American social forces. Such parents, because they do not accept American standards, pass on their own maladjustment to the next generation. Parents who insist upon a fundamentalist view of religion force their children into conflict between schoolwork and home beliefs. Parents who will not tolerate smoking, use of cosmetics, or social dancing are almost sure to have maladjusted adolescent children. If boys and girls from such homes insist upon maintaining their parents' standards, they will become ostracized by their own social group, if they secretly abandon parental ideas, they develop a chronic habit of deceit, if they show the proscribed behavior openly, they are forced into revolt against their homes. Many parents who have not formulated a consistent point of view on modern life force their adolescent children to make decisions on exactly the same problems for which they themselves can find no comfortable solution.

Mrs. M. and her three children came to America in about the year 1900. She had been carefully brought up in the old country and had absorbed her native customs and manners so thoroughly that they seemed to her the only acceptable mode of life. Mrs. M. liked the material comforts of America, but she never made head or tail of American social life. She guarded her children as if she expected them to be kidnaped at any moment. The two oldest ones, both boys, were eager to become "real Americans" as soon as possible. Gradually they rejected their home and parents and escaped from maternal control.

Helene, the daughter, however, lived at home and docilely absorbed what her mother told her. Since she heard no English in her home and since she spent more time there than elsewhere, her English is still hesitant and accented, although she was only two years old when she arrived in America. Little Helene was not exactly unpopular in school, but she was rejected on account of her queerness—broken speech, foreign clothes, foreign manners, and so on. Her mother had managed so to imbue Helene with her own love of the old country that Helene gladly wore clothes markedly different from those of other people and willingly submitted herself to the regime considered proper by her mother. There was never any revolt

of consequence, even when her high school classmates laughed at her gaucheness. In her youth Helene might have attracted masculine attention, since she was a rather good-looking girl, but her appearance was foreign and her ideas about the conduct of escorts were rigid. American boys would not be squeezed into the desired mold, American girls liked the process no better, and most second-generation foreigners were trying to escape similar parental molds and had no intention of handicapping themselves with an un-American wife or friend. Helene lived at home, worked in a nearby library, and never questioned her mother's judgment. Three years ago the mother died suddenly. Helene now finds herself in a difficult position. She has tried living with several different acquaintances, but her ways of doing things and her modes of thought are so alien that no one can be comfortable with her. A year ago she became desperately unhappy because of her extreme isolation and loneliness, and she finally initiated attempts to become Americanized. She now finds that her mother has passed on to her the same problems of Americanization that she herself found insoluble in 1900.

Identification in the Home A good home furnishes its children with models. In the early years of childhood the parents are the people with whom children identify themselves, and sometimes this process continues for many years. That most homes are good in this respect is shown by a study of college men, whose ages were above twenty.²⁵ Seventy per cent reported that they regarded their fathers as models. In fact, their fathers seem to have been their chief sources of identification. This is as it should be. From parents and from parental attitudes toward each other, adolescents derive most of their ideas about home life and marriage. Adolescents are already beginning to think about a home of their own. They can have no greater help in developing healthy attitudes than a good model of happy marriage in their own home.

Duncan Smith is a high school sophomore. He has a sister who is just through college and a foster brother in the eighth grade. His mother is dead. The three adults in his home are his father, his father's younger sister—who has lived with the family since Duncan's birth—and a faithful Negro servant of more than middle age. This somewhat heterogeneous group has been welded into a real family by the efforts of the aunt, nicknamed "Dodo" by the children. She is still a young-looking woman of whose appearance Duncan is very proud. The father is a lawyer by profession and an educated gentleman by preference.

Duncan's sister, Marie, graduated from college last year and is now at home. She has a boy friend whom she hopes some day to marry, in the meantime she is learning how to run a house, cook, plan meals, and make simple repairs. She and Dodo have a session every morning while they divide the day's work between them. Marie admires her aunt's gay disposition, her good looks, and her efficiency. The girl's ambition at the moment is to become as capable as her aunt, to have her fiancé develop into as nice a man as her father, and to have a home in which

²⁵ D. H. Funkstein, S. H. King, and M. E. Drolette, "Perception of Parents and Social Attitudes," pp. 98-119, in P. H. Hoch and J. Zubin, *Experimental Psychopathology*, Grune and Stratton, 1957, 275 pp.

her children can have as much fun as she has always had in hers. She threatens to take white-haired Nannie, the maid, with her. In short, she wants her home of the future to duplicate her home of the past.

Duncan studies at home most evenings, going to his father whenever he needs help. During the past summer he and his father visited about a dozen colleges, staying at each two or three days, so that he might be better able to decide which he prefers to attend. He and his father play tennis together in the father-and-son doubles in the summer and bowl together in the winter. He goes out with various girls, but says he won't fall in love till he finds a girl who is as pretty as Dodo and can cook as well.

The family have many joint enterprises and amusements. On a stormy evening Mr. Smith reads aloud, Dodo darns socks, Marie hems dish towels for her hope chest, Duncan whittles wooden buttons and brooches that he will later use for Christmas presents, and Nannie goes to sleep in a corner. On Sunday mornings there is a great stir all over the house, Nannie makes popovers for breakfast, Marie and Duncan pull the linen off the beds and make them up fresh, and at ten thirty the family is ready to set out en masse for church, where Duncan and Mr. Smith both sing in the choir.

One day last summer, when Marie had had an argument with her boy friend, Dodo told her about her own most serious love affair that had gone on the rocks after a quarrel. The two talked more as if they were older and younger sister than niece and aunt. With similar frankness and companionship Mr. Smith has recently talked over some of his cases with Duncan.

At the beginning of every month the family makes a joint budget. Mr. Smith announces what funds are available, Dodo presents the house accounts of the previous month, everyone puts in bids for the things he or she needs or wants, there is much discussion, and eventually a budget emerges. One small sum is always set aside for joint expenditures, such as a family visit to the movies. The money is given in turn to each child, who keeps an account on what Dodo calls the "swindle sheet" and reports his expenditures at the beginning of the next month.

As a result of all these activities, Duncan and Marie are reaching maturity with a deep love for all three of the adults in their home and a sincere admiration for each. To be sure, Duncan refers to his father merely as a "good egg." Marie says her aunt is "crazy but O K," and all the children call Nannie "Gold Dust" when she is not around, but the careless speech does not fool anyone but themselves. All three are modeling themselves upon the adults they know best, with whom their relation is now more nearly that of one friend toward another than that of a child toward a parent.

Interest in the Home A good home is interesting, exciting, and stimulating. As a result, adolescents feel a desire to stay there during a portion of their leisure time. If hours spent at home mean only an endless round of chores and the ever-present likelihood of being scolded or criticized, adolescent boys and girls will remain there only long enough to eat, bathe, dress, and sleep. Of course, as a place of entertainment, homes cannot compete with such commercialized offerings as the movies or the amusement

parks, but they can furnish the adolescent with interesting things to do or think about, and with a background for an abundant social life. A radio or record player, a clearable space for dancing, simple equipment such as a Ping-pong table, access to the larder, privacy, and a relaxed atmosphere will do much to make home an interesting and exciting place in which adolescents want to stay because they enjoy themselves. Parents may have to help their sons and daughters with suggestions, but they should rarely try to take part in the activities.

The Jones family lives in a large, one-story, rambling house. There are four children—two boys, ages 16 and 15, one daughter, age 13, and an adopted daughter, age 14. All four children are just entering adolescence. Up until a year ago each child had his or her own room, but as they approached adolescence and began to go out to movies and parties, the parents suggested that the two girls should share a bedroom and the two boys another, while each pair fitted up one room for social purposes. A small fund was made available to them, and while the parents made some suggestions, the expenditure was determined mainly by the children. The boys first bought a secondhand pool table, the girls a Ping-pong table and a small radio. Later on, the boys bought a number of small items—cards, an ancient slot machine, a basketball, and a hoop which they affixed to the wall. The girls took out subscriptions to two magazines, acquired a number of puzzles, and got some paints. Both boys and girls made some of the furniture for their rooms. They are also responsible for keeping the rooms in order. All four of them are permitted to play anything that is quiet even on weekday evenings, if they feel they do not need the time for study. The rooms are usually occupied by a number of youngsters Friday evenings, Saturday, and Sunday afternoons. There is a fireplace in the girls' room, where they cook wieners and toast marshmallows. The Ping-pong table folds up when not in use, and the youngsters have a space for dancing. In the course of the past two years they have accumulated a number of books and magazines, and it often happens that they and their friends spend hours together reading, sometimes aloud. They make Christmas presents, May baskets, Easter gifts, and so on, in these rooms, and they have a number of collections—stamps, rocks, miniature animals, and the like. They have recently acquired a record player and some records, to which they listen avidly. Since these two rooms have been available for their use, the children have made their home the center of their social activities, simply because they can have more fun there than they are likely to have in any other place. They still go to the movies sometimes, to school dances, or to parties at their friends' houses, but home is the most interesting place they know.

A desirable home for adolescent boys and girls has thus four main characteristics: first, it allows its children to grow up, second, it does not pass on its own maladjustments, third, it serves as a model, and fourth, it is a stimulating and interesting place.

Application of Principles to the Classroom. A teacher who wishes to maintain a classroom in which adolescents will feel comfortable can do no better than to imitate the characteristics of a good home. She can encourage

her pupils to be just as independent of her as possible. She can keep her own troubles and problems to herself. She can keep on good terms with her pupils and be available for help in time of stress. She can develop her own maturity so that she will appear to adolescent boys and girls as a model to be admired. And she can make her work so interesting and exciting that the pupils want to stay in her classes as long as they can. The good home and the good classroom are thus similar in their fundamental psychological characteristics.

Another writer on adolescence has expressed similar convictions about homes and schools, characterizing those best adapted to the needs of youth in the following way:

Homes in which interesting things happen and in which the co-operation of the children is welcomed. Parents who have attained some measure of emotional maturity and some awareness of their own philosophy of living. A corner for some treasured possessions and a certain measure of responsibility for some part of the common welfare. An atmosphere of courtesy and consideration. The security which follows upon the consciousness of family affection. These are the requirements of youth in the home.

Schools in which meaningful activities occur and in which the willing participation of the pupils is encouraged. Teachers who are themselves emotionally and socially mature. A measure of acceptance and recognition by an admired group. Opportunities for adventures in learning and a chance to contribute deliberately to the corporate life of the whole. These are the needs of youth in the school.²⁶

Typical Behavior of Unemancipated Adolescents

The adolescent who is overdependent upon his home may show his childishness in either of two ways. He may constantly seek the advice and help of others because he has had no practice in meeting situations alone. In the schoolroom he is frequently in need of extra help, not because he does not understand what he is to do, but because he has no independence in doing it. He often cannot follow printed directions because he is so dependent upon personal relationships. If he is given a choice of several assignments, he cannot make up his mind which he prefers. If a decision must be made at once, he asks for a special dispensation until the next day so that he can consult his parents. He usually cannot study without supervision, at home his parents help him with his work as if he were a child, and he finds independent work too lonely. He attaches himself emotionally to almost any sympathetic adult. He cannot submerge himself in a group because he is dependent for his emotional satisfaction upon being the center of attention. He constantly makes ridiculous judgments if he is forced

²⁶ C. M. Fleming, *Adolescence: Its Social Psychology*, International Universities Press, 1948, p. 243. Used by permission of the publisher.

into thinking for himself. He frequently asks privately for some special arrangement. He wants some other partner in the laboratory, he prefers some other work to that assigned, he asks permission to hand in work a day late, he wants to have his seat moved nearer to the window, he keeps library books out when others need them, he wants to be excused from class early, he wants a special arrangement of classes, if he gets into trouble, he begs his teachers to excuse him from punishment. In brief, he expects exactly the indulgent treatment one can expect from older people to whom one is emotionally attached. Every high school teacher has a few such pupils in her classes. They are emotional and social children who are so dependent upon their parents that they transfer this same attitude to their teachers. This simple type of childish adolescent is not difficult to recognize. A description of one appears below.

Foster is a very bright boy of sixteen and a Grade A pest in the classroom. Often he is mischievous and talkative, and much of the time he is unable to guide his own activities. After the other pupils have opened their history books to page 98 and have started to read their assignment, Foster is out of his seat asking an acquaintance where he is supposed to begin. Three minutes later he finds an unfamiliar word and asks another friend what it means, if sent to the dictionary, he is again in trouble because he either cannot find the word or will not read the definition carefully enough to understand it. He wants someone to tell him the meaning. At the end of a fifty-minute period he has perhaps read three pages, has interrupted other pupils several times, has been to the teacher with two or three questions, has been out of the room once or twice, and has chatted with friends en route during each pilgrimage. In contrast to his inefficient work during a study period in school, his homework is always well prepared. Every evening his parents go over his lessons with him, they explain obscure passages—often incorrectly, they read an entire textbook through before they let him begin it, in order to decide whether or not it is suitable for him. If they think it is not, they call upon the teacher who has assigned it and complain. They—and Foster—then pester the teacher until she either substitutes a book the parents like better or precipitates an open break with them. Two or three such breaks have occurred, and the parents have called upon and written letters to the school principal, the supervisors of the teacher concerned, and the superintendent of schools. A few teachers have solved their own problem by giving Foster the special attention he craves, if he is placed in a front seat and allowed to interrupt the teacher twenty times a day he does good work and is well behaved. This treatment does not in the least solve Foster's own problems, however, because the teacher is, in self-defense, strengthening the very reactions that are already too strong. The situation is a difficult one. If a teacher insists upon trying to push Foster into greater independence, she upsets the development of other members of the class and decreases the efficiency of her instruction, if she pampers him, she not only prevents him from growing up but uses time and energy that should be given to others in the group. Some teachers have tried talking with Foster and explaining to him how childish he is. This method of approach is successful for a few hours, but Foster soon relapses into his

earlier attitudes. If one had only the boy to deal with, more progress could probably be made, because he is intelligent and would sooner or later grasp the situation well enough to make efforts of his own to behave in a more mature way, but each step in the right direction during school hours is offset by the smothering attention given to him at home. Until Foster gets old enough to resent parental control, he is likely to remain childish and troublesome.

The second type is more complicated. Although an adolescent is deeply attached to his home and dependent upon it, he may at the same time profoundly desire to be independent, but he does not know how to free himself from home domination by ordinary methods. To cover up his social and emotional attachment to his home and parents, he makes numerous and dramatic overcompensations. This type of unemancipated adolescent is seen in the boy who gets drunk, uses profanity, or has illicit sexual relations as a means of demonstrating his independence to the world. When an over-attached adolescent sets out to break the bonds between himself or herself and the family by unwise and violent methods, he generally does it because all ordinary methods have failed. A boy or girl rarely succeeds in growing up by such violent means, all he does is to build up a habit of childish resentment. The adolescent who is free to buy his own clothes (provided he keeps within his allowance), free to bring anyone he will to his own home, free—within reasonable degrees of guidance—to choose his own work, and free to plan his own time, has adequate opportunity for self-assertion without going to undesirable extremes. The boy who gets into serious difficulties to prove he is grown up is no more independent of his home than the boy who cannot make up his mind which book to read until he has asked his mother for her advice. One is positively conditioned, the other negatively, neither is mature, and neither can regard his home objectively.

One type of overcompensation on the part of an immature boy with deep emotional reactions to his home situation is described below.

Roy is now nearly eighteen years old and a senior in high school. He matured rather late and has been interested in girls only during the past year and a half. His record shows no clashes with school authorities and no need for discipline until recently.

Roy is the youngest of a family of three boys. His two older brothers attended the same schools and made satisfactory records. One of them was a class officer and a member of several school teams. Both of the older boys had fallen in love when they were eighteen or nineteen with girls whom their parents did not like. There had been a good deal of parental interference, and in the end one son had left home for good, although he did not marry the girl in whom he was at the time interested, and the other had eloped after a bitter quarrel with his parents. There is thus evidence that the children of this family were not encouraged to become mature but had to assert themselves against parental authority and make a break with the family if they were to grow up. The father and mother had evidently

not learned much from their experiences with their two older sons. They had merely tightened the control over the youngest one, lest he too should leave them. They did everything they could to keep him a little boy for as long as possible. His delayed maturity aided them in their efforts, so that the dreaded interest in girls, dancing, and parties did not arise until Roy's last year of high school, after most of his friends had already established themselves as more or less independent individuals in their family groups.

At present Roy is going through a girl-crazy stage that should have taken place about two years earlier, when his friends were suffering from a similar affliction. At sixteen he would have been more easily controlled than now. This phase is presumably only temporary, but his parents are frightened by it. It does not interfere greatly with his schoolwork, although his marks are somewhat lower than they were during the first three years of high school. The boy's worst symptoms of maladjustment are shown in his relation to his age-mates and his parents. The former, who have themselves recently emerged from the same silly stage, find him endlessly amusing. They are never tired of poking fun at him, telling him dirty stories, and giving him false advice about how to act with a girl. The rough initiation has produced a good deal of confusion in Roy's mind and has made him uncertain about his social status. He is, however, overcoming this difficulty and will probably re-establish himself among his peers. The situation with his parents is more serious.

As soon as Roy began to have appointments in the evening—before his interest in girls developed—he was most carefully watched. He had to tell in advance just where and with whom he was going, and he was required to be home at a given hour, the time being set so that he would not have any moments of leisure after completing whatever business took him out of the house after dark. The restrictions became even tighter after he started to go out with girls. Usually the deadline for his return was earlier than the hour at which the girl he was with had to get home. Wholly aside from his desire to be with a girl as long as possible, he could hardly be expected to leave her to go home alone merely because his parents were stricter than hers. Roy remembers how his mother suffered when his older brothers were going through the period of emancipation from home, and he does not want to cause her further grief. On the other hand, he cannot keep his self-respect or the respect of his age-mates unless he insists upon having greater independence than his parents wish to give him.

Up until about a month ago Roy had tried to be reasonable, but finally he ran out of patience and began to be resistive and assertive. He hardly speaks to his parents, goes out every night, stays out as late as he wants to, and refuses to listen to their remonstrances. Recently he has told them that he will leave home if they do not stop their constant criticisms. To be sure, Roy is reacting on a childish level, but this is to be expected since he has never had a chance to do anything else. His parents are not willing that he should grow up and become a man. They realize that growing up is a dangerous business, but they do not see that failure to do so is even more dangerous. In the meantime they are forcing their son to react violently against them because they cannot bring themselves to release him from supervision in a normal manner. At present Roy is overcompensating for his earlier submission and for his earlier lack of experience with girls. He actually

feels insecure, inferior, and unhappy, but he talks loudly, boasts of his independence from home control, uses a good deal of profanity, and tries desperately to convince everyone that he is now a grown man

These two types of adolescent appear occasionally in any teacher's class. The conditions cannot be remedied quickly. A "cure" requires both time and a reasonable degree of co-operation from the home. The chief thing a teacher can do for such an adolescent is to explain to him the nature of his difficulties. Once he understands what the matter is, he is often able to work out his own adjustment, either by obtaining greater freedom from his parents or by conforming superficially to their demands until he is old enough to leave home. An individual teacher can do little toward modifying a home situation, but much can be done through a vigorous parent-teacher association by the open discussion of adolescent problems of adjustment. Such an organization permits an impersonal approach and does not imply the criticism which is always inherent in dealing with a single family. The teacher's chief individual efforts, however, are generally centered upon showing an adolescent how he can adjust himself to things as they are.

Summary

A student's home is extremely important in molding his attitudes toward life. In the best type of home, an adolescent is allowed to grow up and take responsibility for himself as soon as he is able to do so. His parents do not pass on to him their own unsolved problems. The boy or girl is proud of his home and feels secure in its harmony. By the end of adolescence the parents in a good home have become friends with, rather than the controllers of, their children. If homes are inadequate in these respects, an adolescent either fails to grow out of his emotional and social childhood, or else he is driven into open revolt. Neither situation is desirable, but the latter is healthier than the former.

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19

Delinquency

Attitudes toward the causes of delinquency and crime have shown an interesting development. When efforts were first made to understand the criminal, the basic assumption was that his abnormality was basically physical. That is, he was a "type." Measurement of several hundred criminals soon exploded this idea, as far as the scientist was concerned, because as a group wrongdoers showed a normal human variability in physical structure—and nothing more. The general public, however, seems still wedded to the idea that a criminal looks like Neanderthal man. The next viewpoint of scientists was that criminals and delinquents were mental defectives. This idea also did not hold up long under careful investigation. Use of intelligence tests soon proved that inferior intelligence is at most only a contributory cause in perhaps a quarter of the cases. Attention then turned from the man to his surroundings, and the environmental theory of delinquency found favor. This theory seemed the more likely since it had long been known that some areas of any city produced more delinquents than others. Under the sway of the environmental theory, investigators analyzed the families, homes, friends, schools, neighborhoods, and districts from which delinquents came. They found a great deal that was amiss, and for two or three decades social scientists thought they had the answer to the age-old problem of wickedness: if there were no congested, filthy slums, there would be no crime. However, the environmental theory alone could never explain why one of two brothers who grew up in the same family, in the same tenement, in the same dirty street became a criminal while the other did not. Nor did it account for the delinquent who emerged from an excellent home situated in a good neighborhood. The fact that delinquents come in larger numbers from some areas than from others suggests that the environmental theory contains some elements of truth. The latest assumption is that the delinquent has a personality with a different structure from that of his brothers and sisters and that he derives his characteristic attitudes from the "different" treatment he receives, first in his home and later in his school and neighborhood. This theory is probably not adequate alone to explain all cases, but it is strong precisely where the environmental theory

is weak. If one accepts either or both the current theories, one has to agree that delinquents are made, not born.

It is the opinion of the writers that emotional insecurity, emotional retardation, emotional distortion, and social inadequacies are of utmost importance in the making of a criminal, but that social deprivations, bad examples, cultural conflict, and an insufficient number of normal outlets for fundamental drives also play a vital part. It is probable that in some cases one element is the more significant and in some cases, the other. Certainly, the slum child has already had one strike called on him—but one strike does no harm provided there are no more.

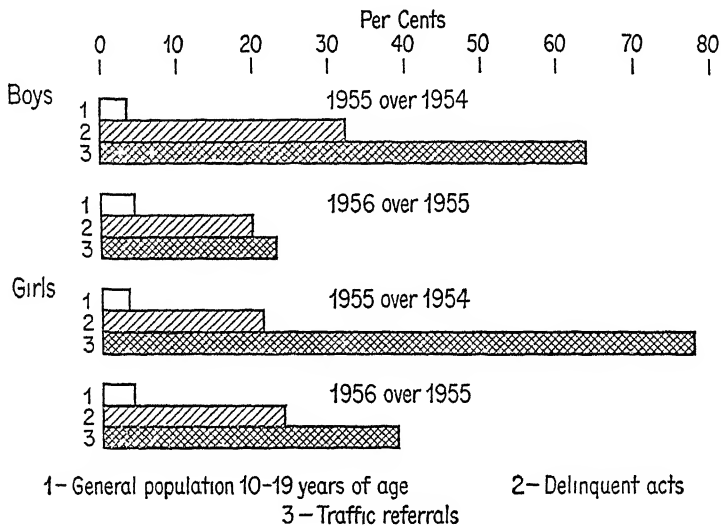


Fig 115 *Increases in Juvenile Delinquency*

Based on figures in "Delinquency and Probation in California, 1954, 1955, 1956," Department of Youth Authority, Bureau of Criminal Statistics, Sacramento, California

The Number of Delinquents

It is extremely difficult to obtain comparable figures from several states, because there is little uniformity in the methods of record keeping. Thus, one state presents figures for the number of cases actually brought to trial, while another includes all arrests for whatever cause and without respect to the disposition of each case. Moreover, the same state changes its bookkeeping methods from time to time, so that it is quite impossible to tell whether the delinquency rate is rising or falling because the percentages in 1940, for instance, were computed on a different basis from those in 1950. Unless one wishes to go into complex statistics, one has to restrict consid-

eration to a single state and to specific years within that state. Figure 115 gives proportional increases in one state for the year 1955 over 1954 and for 1956 over 1955. First comes the percentage increase in the population of those between the ages of 10 and 19, then come the increases in delinquent

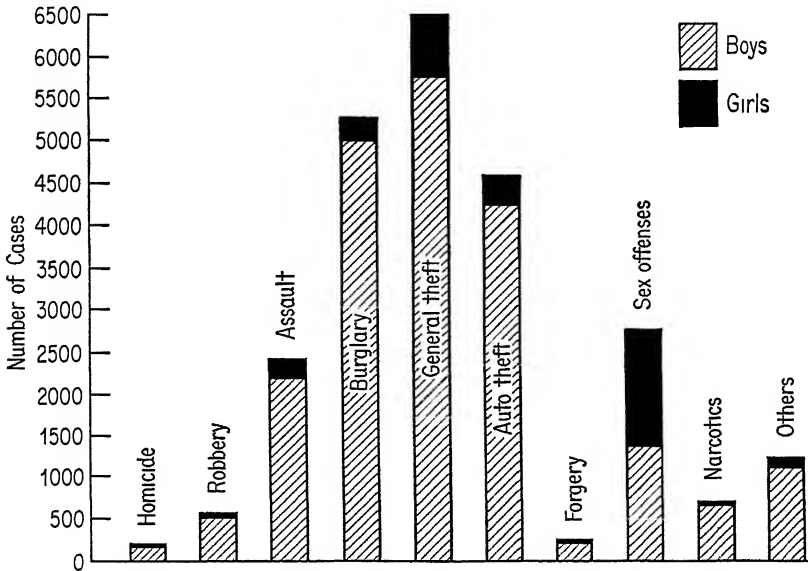


Fig 116 *Classification of Law Violations*

Based on figures in "Delinquency and Probation in California in 1956," State of California Department of Justice, Division of Criminal Law and Enforcement

acts, and finally, the increase in traffic violations—which includes many minor offenses, such as overtime parking, and may reflect primarily the increase in the number of cars on the road. There is no question that the crime rates for both boys and girls are increasing out of all proportion to the size of the juvenile population. In actual numbers, the boys referred to the Probation Department increased between 1954 and 1956 from 45,578 to 78,155, and the girls from 13,029 to 20,507.

The first marked upswings of the crime rate came during and just after World War II, but the change was not so much in the ranks of the returning soldiers as in those who were children or preadolescents at the beginning of that war. It is understandable that upon this generation the stories and movies about the war and the general upsetting effect of frequent moving about, less supervision, and general restlessness might have had an unsettling effect. The crime rates slowed down some in the late 1940's and early 1950's but then began again to rise, especially crimes of violence. This is

not an exclusively American phenomenon. In England and Germany the same reactions have occurred—armed robberies, criminal attacks, gang attacks upon single and harmless citizens who did nothing to precipitate them, and random vandalism.

One other development seems worthy of comment—the change in the proportion of female to male delinquents. Thirty years ago there was only 1 girl to every 18 boy delinquents. In 1940, the ratio was 1 to 15, by 1946, 1 to 10. In 1950 the proportion for the entire country had changed to 1 in 5, in 1956 the figure was 1 in 4. This particular expression of the female's right to enter any male activity is perhaps not wholly admirable!

The nature of the offenses for which adolescents are referred to the Probation Department is also of interest. Figure 116 tells the story. In this report the boys outnumber the girls in all but sex offenses. The total ratio is about one girl to five boys. The most frequent offenses are thefts of various kinds, which make up over two thirds of all offenses.

Characteristics of the Delinquent Adolescent

An excellent study¹ gives a detailed comparison of five hundred delinquent and five hundred nondelinquent boys who were carefully paired for age, residence in the same area of the same city, intelligence, and racial origin. The delinquents were first selected, and then public school boys who matched the delinquents were located. The five hundred boys of the control group had no record of delinquency. Searching inquiry failed to reveal more than an occasional, ordinary, childish misdeed, such as swiping a neighbor's fruit from his tree or jumping onto the backs of trucks or trolley cars, and 75 per cent of the nondelinquents did not show even such minor misbehavior. The five hundred delinquents were all chronic offenders. Over 80 per cent of both groups lived in tenement or business areas. Their ages were between eleven and seventeen, two thirds of them being over fourteen. The entire thousand were given a medical examination, a test of intelligence, achievement tests in reading and arithmetic, a Rorschach test, and a psychiatric interview. This study will be referred to at various points in this chapter as the Glueck study.

The distribution of IQ's from the Glueck study appears in Figure 117. The range is from below 60 to above 120, with a median at 82. Fifty-three per cent would be classed as normal, 5 per cent as bright, 32 per cent as low normal, and 10 per cent as defective. On the basis of such results, one can hardly regard low intelligence as the only cause of delinquency. More over, for every delinquent adolescent with a low IQ, there are many socially normal adolescents of no higher intellectual level.

There is little evidence to suggest that delinquents are in poorer

physical condition than others from the same economic levels. The delinquent boys in the Glueck study were very slightly stronger than the non-delinquents, and the latter were in slightly poorer general health. The only real difference between the two groups was in a skin condition that is known to be largely if not wholly of neurotic origin, in the degree and persistence of enuresis, and in general restlessness. All three symptoms come presumably from the greater incidence—as will presently be shown—of neurotic conditions among delinquents. So far as general health, freedom

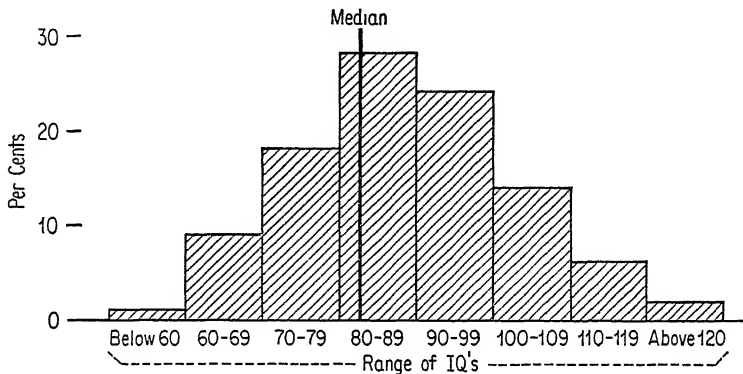


Fig. 117 *Distribution of IQ's for a Delinquent Group*

Based on S. S. Glueck and E. T. Glueck, *Unraveling Juvenile Delinquency*, The Commonwealth Fund, 1950, p. 356

from physical defect, and resistance to disease are concerned, the small differences are all in favor of the delinquent group. The delinquents grew a little more slowly up to the age of fourteen, when they overtook and surpassed the other group. In body build, the delinquents tended to the mesomorphic type, almost none of them were conspicuously ectomorphic. They usually had clearly masculine proportions and relatively heavy muscles.² It does not, therefore, seem that physical defects are outstanding causes of delinquency.

One outstanding characteristic of delinquents is their educational retardation, which is usually more than can be explained by their slight intellectual inferiority. They generally average about a year's retardation mentally, but nearly three years educationally.³ In one study, the educational retardation of 152 delinquent boys ranged from 2.8 to 5.5 years, their

² W. H. Sheldon, *Varieties of Delinquent Youth*, Harper & Brothers, 1949, 899 pp.

³ See, for instance, C. J. Eckenrode, "Their Achievement Is Delinquency," *Journal of Educational Research*, 43:554-560, 1950; A. K. Eccles, "An Inquiry into the Verbal Facility of Delinquent Boys," *Training School Bulletin*, 43:157-160, 1946; J. Jastak and E. Allen, "Psychological Traits of Juvenile Delinquents," *Delaware State Medical Journal*, 16:100-104, 1944; H. A. Lehman and P. A. Witty, "The Educational Attainments of Delinquent Boys," *Journal of Educational Psychology*, 25:695-702, 1934.

average chronological age was 14.5 years and their average mental age was nearly 13 years, but they showed an average educational age of only 11.5 years. The Glueck study showed similar results. All but 16 per cent of the delinquent boys had repeated grades in school, 69 per cent were retarded from two to five years. Twice as many of the nondelinquents as delinquents had always been promoted. The reading and arithmetic quotients of the control groups averaged five or six points higher than those of the delinquents, although both groups had the same range and both made

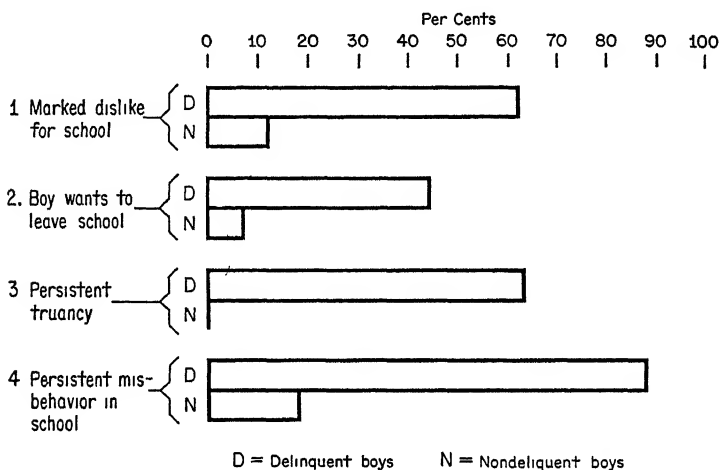


Fig 118 *School Attitudes of Delinquent and Nondelinquent Boys*

Based on Glueck and Glueck, *op cit*, pp 145-148

relatively poor showings. The delinquents disliked school, wanted to leave it at once, and were persistent truants. The normal boys liked school, wanted to complete high school, and rarely misbehaved. Only a few of them played truant, and they were not persistent in this behavior. Even when matched with boys of similar mentality, the delinquents made heavy work of their schooling. Comparison of the delinquents with the nondelinquents in regard to their attitudes toward school and their behavior when there appears in Figure 118. They disliked school intensely (62 per cent), wanted to leave school (43 per cent), were chronic truants (63 per cent), misbehaved persistently (96 per cent) and from an early age (73 per cent).

Delinquents are generally inadequate where verbal symbols are concerned. Reading is difficult for them, and many never read well enough to derive satisfaction from books. As they pass through the grades, they find the work less and less suited to their needs because of the ever-increasing need to read easily. These boys and girls come from backgrounds in which

little value is placed upon verbal abilities, and they usually belong to a peer group that definitely devaluates any kind of academic success. There may be an actual deficiency of a specific kind, but perhaps the explanation is to be found in the attitude of the boys rather than in their learning ability.⁴ They may not learn merely because they see no reason for doing so and a good many reasons for not doing so. The delinquent who states baldly, "I hate reading" is possibly making his own diagnosis.⁵ It should be noted also that delinquents and predelinquents are restless creatures, they are not given to sitting still. One can hardly read under any other condition, and it may well be that the mere physical restraint involved in reading is more than they can tolerate, especially as their tolerance level in this respect is very low.

There seems to be little if anything the matter with the native social capacities of delinquents. They are unpopular enough with their teachers and other school officials, but once they are on the playground or in the gymnasium they participate freely and naturally in whatever is going on. They usually show a capacity to get on with their age-mates that others would do well to imitate. Some delinquents even show distinct qualities of leadership. Although the forms of expression are usually unacceptable, the underlying social competency of delinquents seems at least average. If it were not, these adolescents would not be as successful as they are in forming and maintaining gangs with adequate leadership. One has to distinguish, in this connection, between the underlying capacity for social adjustment and the often undesirable forms through which it finds expression. Delinquents are rarely isolated, introverted characters. They are "sociable" and make contacts with others quite easily.

A study of the personal and social adjustment of delinquents as compared with normal adolescents from upper-, middle-, and lower-class homes shows them to be maladjusted in general, largely because of their hostile and antisocial motivations, but in their basic social skills they were not conspicuously inferior.⁶ The capacity is there, but its forms of expression show distorted patterns. One rather old study that bears directly upon this point reports the social activities of one hundred delinquent and one hundred nondelinquent boys of the same age and intelligence.⁷ The former showed a consistently higher participation in social activities at all ages and a greater increase from the lower to the higher ages than the latter. It

⁴ M. Roman, J. B. Margolin, and C. Harrari, "Reading Retardation and Delinquency," *National Probation and Parole Association Journal*, 1:1-7, 1955.

⁵ H. J. Greenblatt, "I Hate Reading," *National Probation and Parole Association Journal*, 1:8-14, 1955.

⁶ E. A. Hunkleman, "A Comparative Investigation of Differences in Personality Adjustment of Delinquents and Nondelinquents," *Journal of Educational Research*, 46:595-601, 1953.

⁷ B. S. Atwood, "Social Participation and Juvenile Delinquency," *Indiana Bulletin of Character and Correction*, no. 210, 1933, pp. 208-211.

was again in the type of activity that deviation was apparent, not in the amount

It is in the field of emotional development that one finds the important differences between delinquents and normally behaved children or adolescents. Many investigators have found the delinquent to be emotionally immature. His emotional age is below both his mental and his chronological ages. One study of 276 delinquent and 151 nondelinquent adolescent

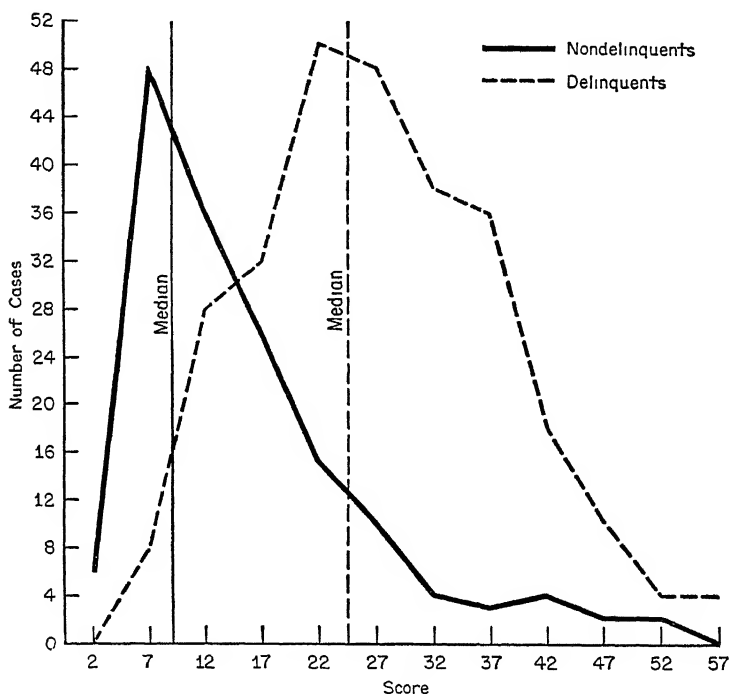


Fig. 119 *Emotional Ages of Normal and Delinquent Adolescent Girls*

Based on figures in M. A. Durea and A. L. Assum, "The Relation of Personality Traits as Differentiating Delinquent and Non-Delinquent Girls," *Journal of Genetic Psychology*, 72: 307-311, 1948.

girls between the ages of thirteen and seventeen gave especially interesting results, which are shown in Figure 119. As the test used was scored for this study, the possible scores ran from 0 to 58, the higher scores indicating the lower degree of maturity. The median score of the normal adolescents was 10 points. Ninety-one per cent of the delinquents scored higher. Over a third of them scored above the ninetieth percentile for the normals.

Delinquents are emotionally unstable individuals, and they are abnormally sensitive to emotional tensions in their families or neighborhoods.

One study reports the following facts about members of a delinquent group⁸ they are unhappy and emotionally disturbed (91 per cent), irresponsible (36 per cent), without purpose (40 per cent), indifferent toward others (44 per cent), unimaginative (48 per cent), and emotionally unstable (48 per cent). They feel themselves to be insecure, rejected, unloved, inferior, guilty, and frustrated.⁹ Unlike the neurasthenic, who may experience similar feelings,

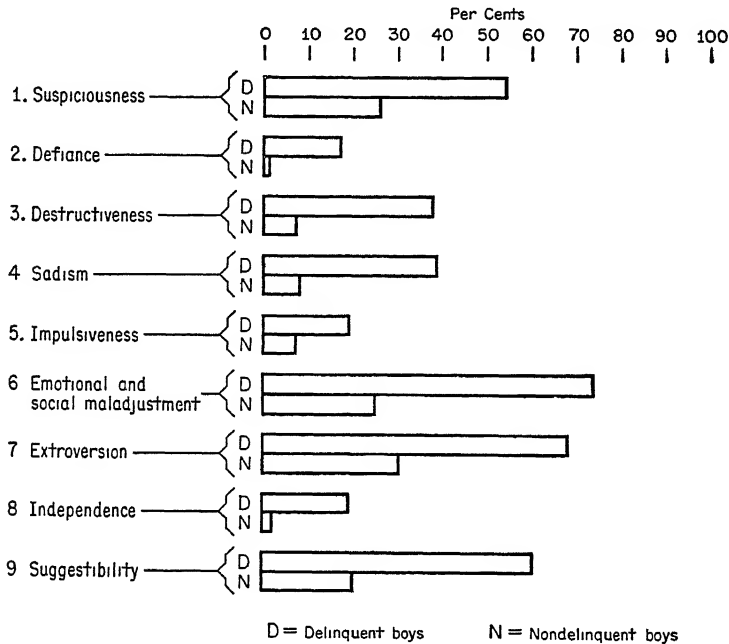


Fig 120 *Personality Traits of Delinquent and Nondelinquent Boys*

Based on figures in Glueck and Glueck, *op cit*, pp 219-236

they do not allow themselves to be beaten by the world. They fight back. As a result, they become aggressive, hostile, suspicious, jealous, and quarrelsome. They blame others for their own shortcomings. This tendency for projection appeared in results obtained from 250 delinquents, ten to thirteen years of age. Of the entire group, 189, or 76 per cent, gave responses that projected blame onto others, as compared with only 36 per cent among normal children.

The Glueck study reveals the personality traits of delinquents to be as

⁸ V. Birkness and H. C. Johnson, "A Comparative Study of Delinquent and Non-delinquent Adolescents," *Journal of Educational Research*, 42:561-572, 1949.

⁹ F. T. Gatling, "Frustration Reactions of Delinquents, Using Rosenzweig's Classification System," *Journal of Abnormal and Social Psychology*, 45:749-752, 1950.

indicated in Figure 120. They are resentful, hostile, suspicious, unconventional, self-centered, emotionally unstable, suggestible, extroverted, and destructive. The nondelinquents give a quite contrasting picture as a group, although some of them show each separate trait. They are outstandingly submissive and stable, and they lack the destructive trends, the impulsiveness, and the defiance that characterize the delinquents with whom they were paired.

The typical "delinquent" personality already begins to emerge from these studies of individual traits. Two studies take the characterization a little further. In one case, 382 boys and 140 girls who had police records were compared with 200 boys and 200 girls with absolutely no record of misbehavior.¹⁰ All were from the ninth grade. The test of personality types used revealed the delinquents to have profiles of the psychopathic, paranoid, or hypermanic types, as compared with the essentially normal outlines

Table 37 SELF-CONCEPTS OF JUVENILE DELINQUENTS AS INDICATED BY TEST

<i>Attributes</i>	<i>Per Cent</i>
Desire for love or praise	100.0
Overt sex interest	95.6
Dejection	82.4
Desire for achievement	79.4
Acquisition (of material things)	75.0
Aggression, verbal	64.7
Failure	52.9
Conflict	44.1
Aggression, physical, antisocial	41.2
Running away from home	38.2
Rejection	33.8
Domination	32.4
Aggression, physical, social	25.0
Abasement	20.6
Destructiveness	17.7
Passivity	11.8

Based on F. M. Young, "Responses of Juvenile Delinquents to TAT," *Journal of Genetic Psychology*, 88: 251-259, 1956.

of the control groups. That is, the delinquents were of the irresponsible, defiant, suspicious, destructive, overactive, extroverted type—not depressed, introverted, withdrawn, or underactive. The investigator in the second study gave the Thematic Apperception Test¹¹ to 34 delinquent girls and

¹⁰ S. R. Hathaway and E. D. Monachesi, "The MMPI in the Study of Juvenile Delinquents," *American Sociological Review*, 17: 704-710, 1952.

¹¹ See pp. 319 ff.

834 delinquent boys There were some minor differences between the sexes, but because these do not seem important, results will be given for the group as a whole The themes of the stories told reflect an unhappy personality that is fighting back If the various kinds of aggression were not reported separately, this trait would be very close to the top of the list

The stories told centered about parents and children. Such incidents as the following appeared the parents are hurt, ill, dead, absent from home,

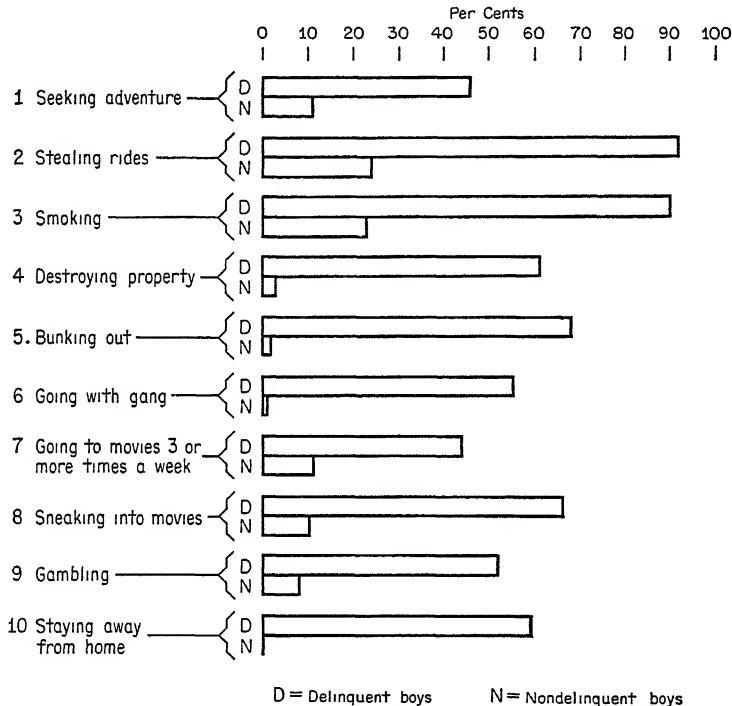


Fig 121 *Recreational Activities of Delinquent and Nondelinquent Boys*

Based on figures in Glueck and Glueck, *op cit*, pp 160-163

in poverty, working hard, the parents are angry at the child, punish him, refuse his wishes, require work from him, lock him in a closet or out of the house, the child disobeys the parents, runs away from home On the positive side, there are also some items the parents hunt for the child, advise him, are proud of him, give him a gift, love the child, play with him, help him, forgive him, take care of him, the child also helps the parents The negative incidents involved the father with an average of 22 per cent, and the mother with an average of 18 per cent The positive incidents involving

either parent amounted to 14.6 per cent. In view of the types of home from which delinquents come and the customary relationships between them and their parents, one can assume that most of the positive stories are expressions of wish-fulfillment.

The recreational life of the two groups in the Glueck study also shows marked differences and is revealing of personality. The results appear in Figure 121. The delinquents favored adventurous activities and shunned competition, they were heavy patrons of the movies, their idea of fun consisted in stealing rides on streetcars or trucks, in staying away from home, in destroying property, in smoking, and in gambling. They played in the streets, and they roamed afar. Their companions were more often than not members of a gang. The nondelinquents show contrasts in almost all respects, although they also attended movies frequently and played on street corners, presumably for lack of any better place. However, they used playgrounds wherever these were available. What the delinquent does when he is merely amusing himself shows clearly what kind of person he is. One can easily understand that he would be in constant conflict with others and in constant disciplinary difficulties.

The vital differences between the normal and the delinquent child are to be found, then, not in intelligence, health, or basic social competency, but in the emotional immaturity, instability, and frustration that produce in the delinquent a maladjustment to home, school, and society.

Characteristics of a "Delinquent" Environment

Three elements in the total social situation seem to be of utmost importance in influencing the behavior of delinquents—the home, the neighborhood, and the school. Because of their outstanding importance they will be dealt with in some detail.

The Delinquent Home The homes of the delinquent and nondelinquent boys in the Glueck study were of much the same external type—overcrowded tenements with poor sanitation and poor furnishings—but those of the nondelinquents were cleaner, and fewer of the families were on relief. The family stock of the two groups was definitely poorer for the delinquents. Among both the immediate ancestors and the living relatives there are appreciably more defectives, emotionally disturbed people, drunkards, and criminals. The parents and siblings of the delinquents also show an excess of these same traits, as indicated in Table 38. The differences between the two groups run from 6 to 39 per cent, and in all categories the delinquents show the higher percentage.

Of late, the emotional currents and tensions within the homes of delinquents have been analyzed and studied. Many investigators feel the fundamental causes of delinquency are to be found in the treatment accorded a

child by his parents, especially during his preschool years. The basic theme is one of rejection, for various reasons, on the part of the parents.¹² For instance, in a group of 116 delinquent boys, 55 (47 per cent) had been rejected by their mothers and 40 (34 per cent) by their fathers. Maternal rejection began before birth in 20 cases, before the age of two in 6 more, and during early childhood in the remaining 29.¹³ In addition, the parents showed a

Table 38 FAMILIES OF DELINQUENT AND NONDELINQUENT BOYS

<i>Characteristic of Home</i>	<i>Mothers</i>		<i>Fathers</i>		<i>Siblings</i>	
	<i>Delin- quent (%)</i>	<i>Non- delin- quent (%)</i>	<i>Delin- quent (%)</i>	<i>Non- delin- quent (%)</i>	<i>Delin- quent (%)</i>	<i>Non- delin- quent (%)</i>
Serious physical ailment	49	33	40	29	41	23
Mental retardation	33	9	18	6	50	25
Emotional disturbances	40	18	44	26	37	26
Drunkenness	23	7	63	24	21	15
Criminality	45	15	66	34	65	39

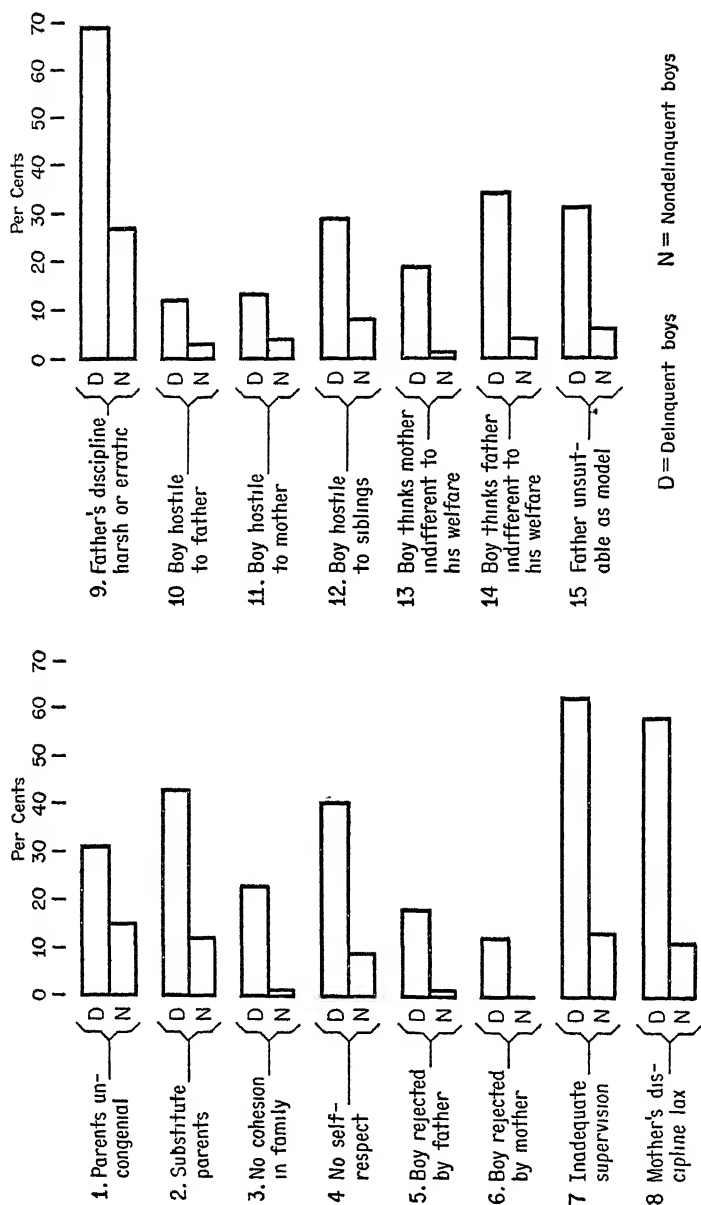
From Sheldon Glueck and Eleanor T. Glueck, *Unraveling Juvenile Delinquency*, Harvard University Press, 1950, p. 98. Reprinted with permission of the publishers and The Commonwealth Fund, 1950.

profound maladjustment to each other. There were 11 divorces, 22 separations, and 50 cases of severe quarreling with intermittent desertion. Thirty-one mothers and 36 fathers showed severe emotional instability in their own personalities. A total of 99 out of the 116 boys, or 85 per cent, suffered from at least one of these family situations: maternal rejection, paternal rejection, parental incompatibility, "disturbed" mothers, or "disturbed" fathers, while 62—or 53 per cent—suffered from more than one—three of the boys suffering from all five.

The emotional interrelationships of the families in the Glueck study are summarized in Figure 122. The parents of the normal boys expressed warm affection for them and received affection from them. The boys felt that their parents were really interested in them. The discipline was usually firm and kindly and included other types of punishment than merely physical. Between the delinquent boys and their mothers, affectional relationships were fairly good, but between the boys and their fathers there was too little warmth and too much hostility. Discipline by both parents was lax, erratic, or overstrict, and both depended mainly upon physical punish-

¹² H. M. Shulman, "The Family and Juvenile Delinquency," *Annals of the American Academy of Political and Social Science*, 261:21-31, 1949.

¹³ J. Lander, "Traumatic Factors in the Background of 116 Delinquent Boys," *American Journal of Orthopsychiatry*, 11:150-156, 1941.

Fig 122 *Homes of Delinquent and Nondelinquent Boys*Based on figures in Glueck and Glueck, *op cit*, pp 108-112 and 125-132

ment as a means of control. Although the two groups of boys came from the same social milieu and although the external features of their homes were similar, the affectional interrelationships show marked differences. The nondelinquent has the affection, interest, and support of his parents, the delinquent does not. Furthermore, the families of the normal boys were characterized by careful planning, self-respect, good relations between the parents, adequate supervision of children, and marked cohesiveness of the group. The families of delinquents lived in a haphazard sort of way and had poor standards of conduct, the parents did not get along together, the children were not supervised, and joint family recreations were virtually absent. Nearly twice as many delinquents as nondelinquents came from broken homes, and nearly four times as many were living with people who were substituting for their parents.

When one talks with delinquents and with their parents one is struck with the lack of normal friendliness between them, with the attitude of each toward the other, and with the inability of the parents to establish control without arousing resentment. For instance, among the parents of 1,465 delinquent boys, only 8 per cent played with their children or went on excursions or picnics with them, an even smaller proportion was found among 672 boys who were "repeaters", and the smallest proportion of all was found for parents of boys who were before the court on serious charges.¹⁴ Such facts suggest considerable estrangement between the generations. The discipline in the homes from which delinquents come is usually harsh or inconsistent, and often both. Renouncing of an instinctive desire always results in some degree of frustration, but the pleasure derived from parental approval in good homes is sufficient to offset the frustration. In poor homes, however, there is no such compensation, and the frustration soon turns into rebellion against the parents. The children become resentful, hostile, and unwilling to conform, and this attitude, originally directed toward the parents, soon carries over into rebellion against authority outside the home, against school, and against society.¹⁵ Finally, there are some parents who use their child either to satisfy their own suppressed desires or to serve as a scapegoat for these desires. They derive satisfaction through their child's delinquencies. They maintain their own emotional equilibrium at the expense of the child's development. If the parents would like to be quarrelsome and get into fights but repress this desire, their child is likely to fight, if they have repressed impulses to steal, he is likely to steal. This process works just as efficiently when it is unconscious as when it is not. The child's response to the situation is usually a deep hostility toward the person who has so overburdened and misused him.

¹⁴ W. W. Wattenberg, "Family Recreation and Delinquency," *Focus*, 29 6-9, 1950

¹⁵ A. M. Johnson, "Sanctions for Superego Lacunae of Adolescents," in K. R. Eissler (ed.), *Searchlight on Delinquency*, International Universities Press, 1949 pp. 225-245

An interesting comparison revealed differences between boys from juvenile court and college students who had, in their precollege days, committed the same offenses but without being brought into court ¹⁶ The college boys showed a history of acceptance by their parents and support by both home and community at the time of their offenses. The juvenile delinquents were friendless and rejected by their parents, and confused in their moral standards. Almost all adolescents get into difficulties, but those who are supported by parents and friends manage to weather the storm.

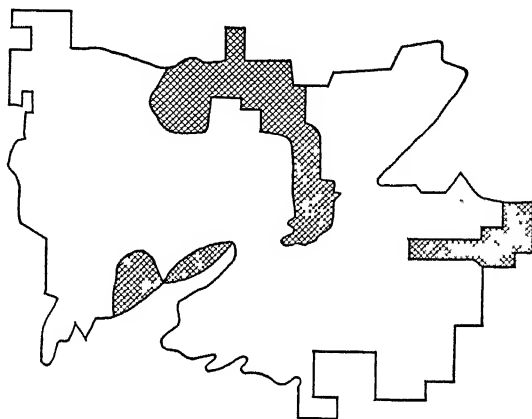


Fig. 123. *Delinquency Areas in a Large City*

Based on A. L. Porterfield and R. L. Talbert, *Mid Century Crime in Our Culture*, The Leo Potisham Foundation, 1954, p. 65

The Delinquent Neighborhood During the last thirty years many studies have been made in various places to show the occurrence of delinquency in different areas of a city. The approach has been entirely pragmatic. Investigators have first taken a detailed map of the city or area under investigation and have tabulated upon it the location of those homes from which delinquents came. In all cases these homes centered in a few districts, sometimes in not more than two or three. Having located the critical neighborhoods in this way, the investigators next made a careful survey of these localities to determine the characteristics which differentiated them from other districts. Most of this work was done under the influence of the environmental theory of delinquency. It remains valuable and makes contributions to an understanding of delinquency.

The map in Figure 123 gives the outline of a large city, in which there are three "delinquent" areas. The largest is a rundown district of near

¹⁶ A. L. Porterfield and C. F. Clifton, "Youth in Trouble: Studies in Delinquency and Despair, with Plans for Prevention," *Bulletin of The Leo Potishman Foundation*, Fort Worth, 1946, 132 pp.

slums. The other two are relatively small and are located in the neighborhood of large industrial plants. This concentration of delinquency in a few areas and its absence from the remaining sections of a city is typical of every community thus far studied.

Study of these delinquency areas in the many surveys that have been made indicates that they are of three general types: business districts, manufacturing districts, and districts in which the nature of the population is changing. In no investigation was there more than a scattering of delinquents from strictly residential parts of a city.

A business district is typically a place where adults are busy with work or amusement and have no time or attention for children. The adults there, except possibly policemen, feel no responsibility about what the children are doing. Consequently, the youngsters have none of the supervision that comes to all children who live or play in a residential district, where the mothers especially pay attention to anything that any child is doing. Manufacturing districts are not much more acceptable as places in which to bring up children. In the first place, the sights and smells are likely to be so unsavory that only those who cannot afford to live elsewhere will live there. Only cheap houses are built, and the inhabitants are those who work in the nearby factories—mostly families of unskilled or semi-skilled laborers. Recreational facilities for children are usually missing because the land is too valuable to be used for playgrounds. A business district usually abounds in forms of amusement intended for adults, but a factory district is rather worse in this respect because the amusements are of a lower type—poolrooms, cheap theaters with burlesque shows, houses of prostitution, saloons, men's "clubs," hangouts of gangs, and so on. Neither factory nor business district offers the protection or the normal outlets for activity that children need.

The third type of district presents a somewhat different problem. Suppose that the houses in a few blocks have been tenanted primarily by Hungarians, for instance, while this situation lasts, there is formed a little, closed-in colony, the members of which feel responsible for its children. Suppose, then, that these people begin to drift away—perhaps toward some new place where the men are employed. The cohesion begins to break up almost at once, and is further broken if, for example, Italians start moving into the vacated houses. If the process goes on and the neighborhood becomes entirely populated with Italians, there is again social cohesion. But during the period of the shift, the district is pulled apart by antagonistic social forces. The adults of the two groups do not get on with each other, the children inherit these antagonisms and develop competing gangs. The looseness of social control is furthered if the adults of both groups speak much less English than do their children. In any case, the neighborhood has lost one set of standards without acquiring another. While the change is in process it becomes an area in which the rate of delinquency is higher than the rate in nearby districts that are inhabited solidly by members of either nationality alone. "Mixed" districts—regardless of the elements entering into the mixture—are also unsettled districts in which delinquency is likely to flourish.

Perhaps the outstanding characteristics of all these "bad" districts is

that they offer no social cohesion, little protection, little supervision, and only warped outlets for childish activities. The "good" district presents the opposite picture. It is one in which there are social traditions, excellent protection (in the form of observant adults), and adequate outlets for the restlessness and emotional drives of childhood and adolescence.

Table 39 COMPARISON OF GOOD AND BAD NEIGHBORHOODS

<i>High Delinquency Areas Are Characterized by</i>	<i>Low Delinquency Areas Are Characterized by</i>
1 Excessive retardation of children in school (35%)	Moderate retardation of children in school (26%)
2 Low intelligence	Average intelligence
3 High birth rate and high infant mortality rate (83 per 1,000)	Low birth rate and average infant mortality rate (50 per 1,000)
4 Low rents (\$40)	Average rents (\$50)
5 Few automobiles owned (15 per 100 families)	Many automobiles owned (156 per 100 families)
6 Great overcrowding (223 people per acre)	No overcrowding (36 people per acre)
7 High adult crime rate	Low adult crime rate
8 Few Boy Scout troops	Many Boy Scout troops
9 Few copies of <i>The New York Times</i> sold	Many copies of <i>The New York Times</i> sold
10 Many tabloids sold	Few tabloids sold

The neighborhood furnishes the setting in which a child is educated either for an acceptance of conventional attitudes or for an acceptance of rebellion toward such attitudes. It furnishes him with his models. It limits the forms in which he may express his instinctive drives. It provides him with standards—either the conventional ones or those of organized crime. Perhaps the most confusing neighborhoods are those in which both standards thrive alongside each other. Delinquency is learned behavior, it therefore requires association with and instruction by other delinquents, who are provided by the neighborhood—and sometimes by the immediate family. In such cases, the children learn their delinquency through the perfectly normal process of identification, either with their parents or with outstanding adults in their environment. The neighborhood also makes its pressure felt after a child's first misdeeds. It may label him as a delinquent, deprive him of participation in normal childhood groups, and eventually banish him to those areas that will sanction his aggressiveness, or it may take him to its bosom—if it is already well populated with adult criminals—and give him the first real approval and acceptance he has ever known.

The greater world outside his immediate neighborhood also exerts an effect upon the young offender through the various means of communication—the newspapers, the comics, the radio, the movies, and television¹⁷ Newspapers that glorify crime in lurid pictures and morbid detail have their greatest sale in the most delinquent neighborhoods of a city Such publicity not only focuses the attention of the children on crime but furnishes them with rationalizations for any later misconduct From newspapers the children learn also of the inconsistent moral values of adults, of sexual misconduct, of business dishonesty, of fraudulent tax returns, of bribery, of abortions, of fee splitting, of bootlegging, of black markets, and of political corruption From this type of reading children derive the ideas that any crime is all right if one can get away with it and that adult obedience to law is only selective at best, not at all the cast-iron system of right and wrong about which they have been told Since the sensational press wastes no space on the ordinary citizen who behaves himself, it is not surprising that children get extremely warped ideas about adult morality from their newspaper reading This conflict of attitudes is very unsettling, especially to adolescents¹⁸ The movies have improved a great deal in the last two decades through their own enforcement of better standards, but some of the cheaper shows are still objectionable It cannot be mere accident that the delinquent goes to the movies more often than the nondelinquent Boys who take no part in the extracurricular activities of their schools or in other organized recreation and derive their chief social satisfaction from delinquent activities spend twice as much time at the movies as nondelinquents¹⁹

The Delinquent School The public school in general is a contributor to mental health rather than to delinquency, but there are still a few characteristics of the average school that may produce abnormal behavior. The chief adverse element is the nature of the curriculum. Delinquents are typically nonbookish, nonintellectual, nonacademic, nonverbal individuals who do poorly in the traditional school subjects It is probable that young delinquents experience a good deal of frustration in the course of their school life By now it is certainly evident that they soon revolt against the traditional school and leave it at the earliest possible age, usually after periods of truancy and long records of aggressive misconduct When they leave school they usually abandon the one potentially constructive influence in their lives

It is highly probable that some teachers also contribute to the creation of the delinquent child They influence him, as they do all other children, through the emotional atmosphere of their classrooms If they are demand-

¹⁷ M. B. Clinard, "Secondary Community Influences and Juvenile Delinquency," *Annals of the American Academy of Political and Social Science* 261 42-54, 1949

¹⁸ H. D. McKay, "The Neighborhood and Child Conduct," *Annals of the American Academy of Political and Social Science*, 261 32-41, 1949

¹⁹ E. Shanas, *Recreation and Delinquency*, Chicago Recreation Committee 1942

ing, harsh, domineering, and authoritarian, they arouse the aggressive hostility of the already rejected child, who now finds himself rejected once more. If, as sometimes happens, such a child has a different teacher every semester in elementary school and another eight teachers during junior high school, he may have gone through the painful period of rejection as many as twenty times. One can hardly blame him for hating school, for playing truant, or for leaving as soon as possible. Perhaps the worst teacher for the delinquent-in-the-making is the one who not only cannot accept him but also takes his reactions to her rejection as a personal insult.²⁰ Such a teacher regards misbehavior as a reflection upon her competence, she becomes so involved personally that she loses her self-control—sometimes descending to the child's own level of bad manners—and she is quite unable to make an objective study of the pupil and his problems, largely because she is a good deal sorrier for herself than she is for him. School discipline is sometimes so administered as to be thoroughly unacceptable even to well-balanced, normal children and adolescents. The effect upon delinquents is disastrous and stimulates them to even greater hostility toward their school.

A "delinquent" environment consists, then, of three main elements: a home in which parents are unsuccessful economically, are of not more than average native ability, are of undesirable personal habits, and are of questionable morality, who are ineffective in discipline, unable to furnish emotional security, and inclined to reject their delinquent child both before and after his misdeeds; a neighborhood that is devised for adults, quite without safeguards for children, largely without safe outlets for emotional and social life, and full of unsatisfactory models and conflicting standards; and a school that tries to make scholars out of nonacademic material and sometimes furnishes teachers who are too rejective in their attitudes. When all three elements are affecting the same unstable child at the same time, a delinquent is likely to be produced.

Factors Contributing to Delinquency and Theories about Them

It is not difficult to list the factors that have been shown by various investigators to be related to delinquency. Some of those in the list appearing in Table 40 are doubtless of more importance than others.

Because of the somewhat conflicting ideas current at present as to the causes, development, and treatment of delinquents, it seems wise to review briefly the possible causes and to present two somewhat opposed, but not mutually exclusive, interpretations. Delinquency is a highly complex phenomenon, for it is a way of life that a child develops during his first ten or

²⁰ N. Fenton, "The Delinquent in the Classroom," *Forty-seventh Yearbook of the National Society for the Study of Education*, 1948, Pt. I, pp. 48-65.

Table 40 FACTORS CONTRIBUTING TO DELINQUENCY

Resulting Personality Traits	Heredity	1	Bad family stock—incidence of feeble-mindedness, insanity, epilepsy higher than in families of nondelinquents
		2	Defective mentality—average IQ of delinquent groups is 85 to 90 instead of 100 (However, about two thirds of all delinquents are of normal or above-normal mentality)
		3	Specific inability to handle verbal symbols, resulting in slow progress in school
		4	Unusual vitality, drive, and energy, resulting in restlessness, over-activity, and aggressiveness
	Home	5	Poverty and crowding in home
		6	Delinquency and crime among parents or older siblings
		7	Home broken by death, separation, divorce, desertion, or prison term
		8	Lack of emotional security, high degree of tension in home, lack of emotional stability in parents
		9	Lack of proper or uniform discipline
		10	Rejection of child by parents, neglect of child, lack of interest in his activities
	School	11	Poor work in school, one or more retardations
		12	Dislike of school
		13	More or less truancy
		14	Rejection by some of the teachers
	Neigh- borhood	15	Existence of many criminal models in the neighborhood
		16	Lack of adequate supervision and protection
		17	Lack of adequate outlets
		18	Exposure to low or conflicting adult morals
		19	Exposure to minority conflicts
		20	Feelings of inferiority, insecurity, and rejection
		21	Constant frustration and development of deep hostility
		22	Emotional immaturity
		23	Aggressive drives turned toward parents, school, and society
		24	Identification with criminal models
		25	Emotional satisfaction found in antisocial groups.
		26	Strong impulses, uninhibited by conscience

fifteen years of existence. If there are two explanations, each emphasizing different phases supplementing each other, it seems worth while to consider both, and then to attempt a synthesis.

According to one outstanding authority, delinquency is an impulsive reaction made in order to find direct or indirect satisfaction for instinctive urges. The young delinquent does not find in his home and neighborhood enough love or attention or admiration to satisfy his needs, nor does he find

many suitable outlets for his drives toward activity or play. His social urges find their readiest expression in the gangs that already exist. Such groups are made up of others like himself. The members are rejected by their homes and are in acute conflict with the community. They rebel openly with direct acts of aggression. Such behavior is well calculated to awaken a desire to imitate in the bosom of the child who has a similarly acute, but as yet only indirectly expressed, conflict of his own. His hostile urges are of the same sort as theirs, and by joining forces with them he can not only express himself more directly, but can even obtain in return admiration and absolution from a lurking sense of guilt that might otherwise mar his content. One can see that from the delinquent's point of view there is not much to be gained by a reform in his behavior. Moreover, a delinquent act, such as stealing, often becomes an outlet for tension. The connection between the act and the release may be quite accidental in the beginning, but soon the child discovers this new outlet for his insecurity and unhappiness. When tensions pile up inside him, he can discharge them by stealing something, an act which makes him feel much more comfortable. It is also probable that the delinquent act gives him pleasure. Thus, the tearing up of a small grocery by pulling things off the shelves and spilling them on the floor may serve not only to "get even" with a grocer against whom he has a grudge but also to give him a feeling of omnipotence, with accompanying release from his usual fears and inferiorities. He may therefore indulge in periodic destruction, perpetrated against entirely unknown owners of property, because these episodes contribute to his sense of success and well-being more than any resulting detection or punishment is likely to offset. The outstanding point in this explanation is the constant interchange between childish needs and environmental rewards and pressures.

The psychoanalytic school has presented an explanation that rests primarily upon a faulty personality structure that has already developed before the child is old enough to leave his home. During the first two or three years all children are "delinquent"—that is, they take what they want immediately, directly, and without inhibition, and they derive pleasure from their unsocial reactions. By the time they are three years old, however, they should have learned to wait a little while for satisfaction and to accept substitutes for gratifications that are denied them. That is, they can derive enough pleasure from the approval of their mother that they can keep themselves from tossing books on the floor, for instance. They should be able to bear a little tension in order to reach a goal. When there is a conflict between immediate instinctual gratification and their affective relationship to their parents, they should be able to inhibit the former in order to improve the latter. If, however, the child has not advanced to this level, he cannot bear the tensions that an increasingly active life puts upon him, so he regresses to his earlier direct, uninhibited behavior of letting his drives

have full and immediate expression and deriving great satisfaction and pleasure from their fulfillment. Since the youthful predelinquent is already a rejected child, his natural attachments to his mother have become weak. His failure to gain what he deeply wants turns his love into hostility, and he expresses his feelings by aggression toward her. If development has been normal, between the ages of three and six a child should have developed a superego, or conscience, and a strong enough ego to control many of his impulses and to meet some of the demands of the superego, at least, he knows what he should do, and in general he tries to do it, even though his control is not always strong enough. Because the delinquent has already begun his regression, he makes little progress in the development of a superego. He is probably more comfortable if he fails completely, since then there is no inner conflict, but often he does develop just enough conscience to stir up feelings of guilt in himself and yet not enough to be of much guidance to him. Once in a while one finds a delinquent with a very severe superego that is strong enough to make him indulge in antisocial acts in order to punish himself. More often, however, any urge to self-punishment is transmuted into blame against the environment, a far more comfortable attitude, especially as the child can now discharge some of his hostile feelings against the straw man he has just set up.

As life becomes more complex and makes more demands upon him, the child gets into more and more open revolt. He continues to carry out his primary desires and to ignore environmental pressures. His attachments to people are never strong enough to act as inhibitions upon his drives. His parents usually meet his behavior either by excessive severity or by excessive indulgence, and sometimes by an oscillation between the two extremes. While the neurotic is greatly influenced by the attitudes of others toward him, the delinquent is not affected at all by them. He continues to act on the pleasure principle. The delinquent is, then, an individual in whom instinctive drives are strong, conscience is weak, and the ego is bent upon immediate pleasure without respect to the generally accepted norms of behavior. This combination of traits keeps him in conflict with everyone and leads him to attack reality before it gets a chance to overwhelm him. Delinquency gives him, therefore, his most satisfactory defense against a world that frightens and annoys him without giving him any adequate compensatory pleasure.

These two views are not in contradiction, although they emphasize different aspects of the total problem. The most important difference between them is the emphasis put by the Freudians upon the first two or three years of life and the tracing of delinquency to a faulty structure of personality, without much apparent regard for other possible elements. Both views have much to offer to the student of human behavior.

When reading through the three short case histories below, the student

is advised to refer to the list of contributing causes given on page 483. It might be well to list which causes seem to have been operative in which cases, so as to see how the various forces merge together and reinforce each other in the production of delinquency.

In the fall of 1951 a brief article appeared in a large city newspaper concerning an eleven-year-old boy who had won nearly \$3,000 at a nearby race track. He had been at the track and placed bets many times. On one occasion, he met his mother there. She was greatly surprised to see him, and astounded that he had just won \$1,200, but she made no effort to prevent future visits. In fact, the matter came to official attention only because she wanted to have custody of his winnings.

This boy is a well-mannered, well-spoken, good-looking son of divorced parents. He spends the school year with his mother and the summers with his father, who has a box at the race track. He and the boy have often been there together. During the summer of 1951 the boy formed the habit of going by himself on weekdays when his father was at work. The boy learned about race tracks and betting, not from his age-mates but from his father, by the simple process of observation.

This boy, in talking with the judge, showed a good intelligence and a sophistication far beyond his years. It does not seem probable that a series of successful gambling experiences, resulting in a pocketful of "easy money," is any preparation either for a life of rectitude or for a return to such normal boyish pleasures as scrub baseball, camping trips, or visits to the old swimming hole. The parents have demonstrated their unfitness to care for a child. One suspects that this neglected child has had no proper supervision since his infancy. It seems clear that neither parent knew or cared what he did with his time. Presumably, during the summer at least, he had his whole day to himself, without guidance or supervision. One fears that the moral damage to the boy has already been done.

It should be noted that this boy entered a dubious activity only through the help of indifferent adults—his parents, who did not know where he was, the men at the race track who accepted his bets, although they must have known he was below legal age, and various adult acquaintances before whom he boasted of his winnings. He had attended the races often enough to attract the attention of officials, who determined his age and had just barred him from further betting when his mother sued for control of his winnings. A boy is certainly without proper guidance when he has to depend upon race track stewards for supervision.

Elaine was a child with a normal personality and a normal degree of intelligence. She was somewhat precocious, to be sure, but there was no sign of conflict or abnormal emotional preoccupation in her early years. Her progress in school was normal, and she was popular with both her age-mates and her teachers. She had no record of trouble until her thirteenth year, when she began to have sexual relations with boys and men.

Elaine's father had died when she was about four years old, and her mother had supported herself and her daughter by being the hostess in the dining room of a large hotel. She and Elaine lived in a back room of the hotel. She tried hard to provide a normal life for her daughter and to shield her from the seamier sides of hotel life. Elaine had her lunch at school, and since her mother was free during the

last part of the afternoon, they usually went to a park or out on errands together after school hours. Elaine was put to bed about six-thirty, just before her mother went on duty in the dining room. The mother sometimes augmented her income by visiting the rooms of men guests after the dining room closed. Although she was very discreet, Elaine nevertheless learned about these episodes and assumed them to be normal. She does not seem to have been upset in the least, but she did develop a precocity and an indifference to conventional morality as a result. During her twelfth year she began to have relations with the bellboys and some of the waiters. It does not appear that she sought them out or that she was impelled by any strong inner urge. She seemed to think such behavior was expected of her and submitted to advances without much interest. Her mother was genuinely horrified when she was told of this development and much more deeply distressed over Elaine's misdeeds than Elaine was. At the suggestion of the school psychologist, she gave up her hotel job and took a place as companion to an elderly woman in the country. So far as could be determined, the mother lived a strictly moral life from that time on. Elaine went to a consolidated school, finished the twelfth grade, and soon afterward married a boy who lived on a neighboring farm. She is now a happy farm wife, with three small children. There has never been the slightest sign of further delinquencies. Elaine would appear to have been a normal child who lived under abnormal circumstances and wandered into delinquency mainly because she had developed at the age of thirteen the precocity and hardness that are likely to characterize adults who live in hotels.

Walter first came to official notice in the seventh grade, to which a liberal promotion policy had carried him, although his mastery of schoolwork would have placed him not above the fifth, and his reading more nearly in the fourth. No teacher had ever been able to awaken a spark of interest in the boy. Twice he had been detected slapping and knocking down smaller boys on the playground, but he had been able to convince authorities that he had had no wrong intentions—had merely given a rather too husky boyish love pat. Walter's teachers had always characterized him as flighty, superficial, easily led, impatient, suggestible, irresponsible, and sly, but his small size had kept his aggressions within bounds. With the beginning of adolescence he grew rapidly. Moreover, he became more and more disorganized as a personality. One evening he and three other boys a little older than he were roaming around a residential district, looking for something loose that they could appropriate, but after an hour's fruitless search, they became weary of this pastime. One of the older boys suggested that they "jump" some passerby and take his money. Presently, a rather small, middle-aged man came past. The boys surrounded him, knocked him down, searched his pockets and found only eighteen cents. Infuriated by their small haul, they began to kick the man, now lying unconscious on the ground and to beat him with a pop bottle one of them had picked up. The boys ran away and were not caught for this offense, although they later admitted it. A few nights later the same group went into a park and pulled up several plants, broke windows in the conservatory, and threw rocks out onto the roadway. The following week they broke into an elementary school and tore one room almost to pieces before a watchman's approach caused them to flee. Then, one evening after dark they went out in pairs on bicycles to try a trick they

had devised. Two of them rode with arms interlocked so that their two headlights looked like those of a car. When a motorist approached them, they suddenly broke apart, one going on each side of the approaching car. Before the state police managed to catch them they had put four startled motorists into the ditch and had caused one serious accident, besides scaring an unknown number of drivers. Walter was one of the two apprehended. After an hour with the police his general disorganization finally did society some good, for he "broke" and told all about what he and the others had been doing to amuse themselves. As he talked, it became all too evident that this disorganized, aggressive, heedless, adventurous life exactly reflected his personality. Walter is now in a reform school, but the chances of a reform are very slight. He and delinquency have too much in common.

The Prevention of Delinquency

Delinquency is extremely hard to "cure." Thus, in one sample study, 1,000 delinquent boys were followed for fifteen years. The per cent not rearrested during each successive five-year period was, respectively 19, 22, and 36. There were over 1,300 arrests during the first five-year interval and over 2,000 during each of the succeeding two. Other reports, usually on a much smaller number of cases, sometimes give slightly better figures, but the percentage of "cures" is never high. If there has been little or no treatment, the percentage of recidivism is very high indeed.

It is hard to reform a delinquent because his mode of life is to him extremely satisfactory. It provides what he wants with the least possible delay, it brings him prestige among his fellows, it satisfies his urges, it permits him to punish those who have neglected and rejected him, and it "matches" his personality. There is for him *no other life* that is so rewarding. The typical delinquent does not, therefore, want to be reformed, he wants only not to get caught. He can rarely be reclaimed through love, because he is no longer capable of giving or receiving affection. His deep hatred of schools and teachers prevents a rescue through education. And it is of little use to talk about "congenial work," because no work could be as congenial to him as delinquency. What the would-be reformer often overlooks is that the delinquent *likes* to steal from adults, because the act pays back in small measure the multiple rejections he has received from the adult world. He *likes* to "gang up" on a "good" boy, because the attack will do something to cancel the hurt of rejection by other "good" children. He *likes* random vandalism, because it gives him a chance to work off a bit of his long score against society. He *likes* to inflict pain, because only by enjoying pain can he build an adequate defense against his own. He *likes* to feel callous toward people, because this attitude is an escape mechanism against being hurt. Moreover, success in such activities as those just mentioned bring him prestige among other delinquents, who are the only

people he knows that accept him. Their approval he wants, but that of society means less than nothing to him.

Since cures are hard to bring about, one has to rely upon prevention. And the first question that arises concerns the possibility of identifying the delinquency-prone child far enough ahead of his overt reactions to allow time for remedial treatment. Two studies bear upon this point. In the first, a Social Prediction Scale was used, it seems to have been concerned wholly with interfamilial relationships. The highest possible score was 414 and the lowest 117. The proneness to delinquency is shown in Table 41. There are only 8 chances in 100 that a child with a score under 200 will become a delinquent. If his score is over 300, the chances are 89 in a 100.

Table 41 PREDICTION OF DELINQUENCY (1)

	<i>Per Cent of Probability</i>
Scores under 200	8.2
Scores 200-249	37.0
Scores 250-299	63.5
Score over 300	89.2

From S. S. Gluck, "Spotting Potential Delinquents in the School," *Exceptional Children*, 20:243-250, 1954.

The investigators of the Glueck study went over their data to study the possibility of using scores on tests of personality or items from case histories as bases of prediction, and worked out three prediction tables based on different groups of items. The records of 424 boys (205 delinquent and 219 nondelinquent) were next examined to find out to what extent each table correctly classified the boys. The results are summarized in Table 42.

Table 42 PREDICTION OF DELINQUENCY (2)

	<i>Per Cent</i>
1 Boy correctly classified on all three prediction tables	49 } 87 %
2 Boy correctly classified by two but wrongly by one	38 } successes
3 Boy incorrectly classified on two and correctly on one	11 } 13 %
4 Boy wrongly classified on all three	2 } failures

From S. S. Glueck and E. T. Glueck, *Unraveling Juvenile Delinquency*, published by Harvard University Press for The Commonwealth Fund, 1950, p. 268. Used by permission of Harvard University Press.

If selection of the most clearly related items of a boy's history and the most striking of test results can produce a prediction of 87 per cent, it would seem that an early identification of the delinquent is already feasible.²¹

²¹ See R. E. Thompson, "A Validation of the GSP Scale for Proneness to Delinquency," *Journal of Criminal Law, Criminology, and Police Science*, 43:451-470, 1952, and S. Axelrod and S. Gluck, "Application of the GSP tables to 100 Jewish Delinquent Boys," *Jewish Social Service Quarterly*, 30:127-136, 1953.

The age of first observed "delinquent" behavior among the boys of the Glueck study was as follows: before 8, 29 per cent, before 10, 73 per cent, before 12, 90 per cent, before 15, 100 per cent. These figures refer only to overt behavior. Presumably, if one investigated the first appearance of characteristic traits of behavior, the percentages would be even higher at the early ages. It is the writers' guess that typical traits had appeared in well over half the cases by the time the children entered school, although for girls the attitudes develop rather later than for boys.

A pre-delinquent's life is from an early age a protest against authority and restrictions. He comes into conflict with his parents, his teachers, and his age-mates. His emotional outlets are direct and destructive. He blames everyone but himself. He early begins to play truant from school, to lie about where he has been and what he has been doing, and to indulge in petty pilfering, which is usually not punished by his parents. He makes slow progress in school. He has a history of being unmanageable from nursery school onward, and since infancy in his home. He has already made a typical positive adaptation to his inadequacies and failures, a solution which keeps him from knowing that he has failed and gives him a sense of power over others. Personality tests show him to be hostile, aggressive, egotistical, and infantile. There is relatively little difficulty in identifying the child who will become a criminal because—on a childish level—he already is one.

It is the writers' suggestion that some such questionnaire as that shown in Table 43 be used as a routine procedure in the kindergarten, and once each year in all grades of elementary school. If a teacher has a child in her room to whom several of the items seem to her to apply, she writes his name at the top of a column and then checks those items which describe him. If there is more than one such child, she uses the additional columns. If there are none, she signs her name and returns the sheet unmarked. In this way, a school would receive once a year automatically a report on those children who are delinquency-prone—and would identify them soon enough to institute measures of prevention, some of which are likely to prove effective. Since prevention involves a complete change of personality, what is needed above all is time.

In previous decades most of the recommendations for the prevention of delinquency have centered around the alteration of environment. Such enterprises as the clearance of slums, the opening of playgrounds or swimming pools, and so on, come under this head. These changes are certainly needed, but it is doubtful if they will prevent delinquency all by themselves. One has to add to them procedures for changing the emotional atmosphere within homes and schools. Such suggestions as those outlined below are beginning to appear in the literature.

It has been found helpful if parents and children have one night together every week, if the evening is spent at home, and if the entire family

Table 43. EARLY DETECTION OF DELINQUENCY

A Overt behavior				
1	Is often deliberately destructive			
2	Commits small acts of vandalism			
3	Attacks other children			
4	Deliberately inflicts pain on children or animals			
5	Snatches things away from others			
6	Reacts to discipline by talking back, swearing, sulking, kicking objects, temper tantrums, refusing to do as told			
7	Reacts to discipline by attacking the teacher			
8	Repeats the same offense almost immediately after being punished for it			
9	Although rejected by "nice" children, is a leader among dull, underprivileged, or other rejected pupils			
B Reactions to school				
10	Rarely reads a book voluntarily but is an avid reader (or at least examiner) of lurid comics			
11	Does schoolwork far below his capacity			
12	Has obvious dislike for school			
13	Has played truant at least once			
14	Is a constant trouble-maker			
15	Has been rejected by earlier teachers			
16	Is a nonreader (that is, he seems unable to learn to read at all, or knows only a few words)			
17	Is retarded in school (or, if school policy does not permit retardation, is in grade obviously too advanced for him)			
C Traits of Personality (Your own estimate)				
18	"Gets even" for real or imagined slights			
19	Is violently jealous of other pupils			
20	Derives enjoyment from mere destruction			
21	Enjoys annoying others			
22	Refuses to co-operate with others			
23	Openly dislikes many people			
24	Is markedly overactive			
25	Shows abounding vitality and drive (even though misdirected)			
26	Expresses his feelings without restraint			
27	Is infantile in his reactions			
28	Forms almost no attachments to pupils or teacher			
29	Is almost never affectionate			
30	Has conspicuously bad manners			
31	Does his best to "act tough"			
32	Admires real or fictional criminals			
33	Had rather have his own way and be rejected than conform and be accepted			
34	Seems to lack pity, sympathy, or conscience			
35	Is constantly attacking rules or established customs			
D Economic and social background (If you know the facts)				
36	Lives in an underprivileged district			
37	Comes of poor family stock			
38	Has parents or siblings who are criminals			
39	Receives no discipline, harsh discipline, or uneven discipline at home			
40	Is regarded by parents as a "difficult" child			
41	Is rejected by parents			
42	Is rejected by the parents of other children in the neighborhood			

engages as a group in some kind of communal, constructive, and pleasurable activity. No listening to radio, watching television, or going to a movie or a hockey game was to be considered as a proper activity for "family night," because these, while all right for other evenings, did not involve group effort. Many simple amusements of former generations had to be gotten out and relearned: taffy pulls, making a birthday cake, charades, simple card games, pinning the tail on the donkey, bobbing for apples, putting on a family show, reading aloud, singing together, developing a family orchestra, designing and making Christmas cards or Easter baskets together, or joint construction of new furniture. The only rule was that everyone in the family should take an active part in reaching some group objective, however trivial either the part or the objective. At first these efforts at man-made enjoyment in a machine-made age were not too successful, but gradually parents and children learned to like and trust each other, and the basic hostility vanished. For the parents there should be several frank talks and discussions, at first with leaders from either school or community and later among the parents by themselves. They have a common problem, and they are more likely to solve it together than separately. Some parents resist outside interference, some project all the blame for their child and his misdeeds onto his playmates, some recognize their problem but are too secretive and ashamed to ask for help, while others beg for aid from any and all agencies. The first meetings of parents with such different outlooks are likely to be stormy, but gradually a better understanding develops, and the children begin to receive a different treatment in their homes, usually with a marked reduction of tension.

Most of the recommended procedures for the prevention of delinquency—or for its treatment during its early stages—are aimed at providing activities in which the child or adolescent can be successful, experiences that make him feel accepted, and outlets that are socially approved for his emotional drives. The attack upon the problem is indirect and consists essentially in substituting acceptance for rejection by means of activities that are within the established social norm but are *more satisfying to the adolescent than his delinquency*. A series of suggestions to teachers by one writer on the subject are listed below:

1. Provide children with a variety of experiences—crafts, art, music, athletics—covering a wide range of difficulty and interests, so that every child engages in some activity in which he can win outstanding success.

2. Understand each child's capacities and help him to recognize and develop his abilities—social, emotional, and artistic as well as intellectual—and accept his irremediable limitations.

3. Help him to gain skills and knowledge without unnecessary failure. Be on guard against occasions and incidents which might cause him to feel inadequate.

4. Guide the experiences of the class so that each pupil will gain satisfaction.

and moderate success in human relationships when he is acting along socially constructive lines

5 Provide opportunities for normal emotional responses and accept minor instances of bad manners without comment

6 When an outburst of delinquent behavior occurs in the classroom, do not be disturbed, handle it with objectivity and understanding, try to get into the delinquent's world and see things from his point of view

7 Do what you can to change conditions in the home, school, or community that seem to be giving rise to types of behavior that are "expensive" to the individual and to society ²²

None of these recommendations is either revolutionary or dramatic, but taken together they are likely to be effective. The writers would add one more precept to the list. Try to *like* the delinquent, even when he is being most objectionable. Children are exceedingly quick to sense rejection, no matter how well it is camouflaged, and will see through a pretense. Since the delinquent adolescent has probably not been loved since he was a baby, a small amount of genuine affection will often do more to help a boy rehabilitate himself than all other "treatments" combined.

The following brief account shows what can be done if the members of a community really want to reduce delinquency.

Grand Rapids, Michigan, was having an epidemic of juvenile delinquency in 1938. In one area of approximately 190 families, 156 youngsters had been arrested. The superintendent of police, Mr. Frank J. O'Malley, was suspicious of so much trouble concentrated in one spot. He and his colleagues concluded that the young folks in the area did not have the right kind of things to do in their free time. So they decided to take matters into their own hands.

With very little encouragement and even less financial assistance, they started by renting the basement of the Methodist Mission near the center of the troubled area. After much struggle, the police opened the Grand Rapids Youth Commonwealth, Inc., on Christmas Eve, 1938. From the beginning, the youngsters have liked the program and have learned to think of the police as friends. The center is open afternoons and evenings, six days a week. The membership ranges in age from eight to twenty-one and numbers about five hundred. It includes young folks from Mexican, Italian, Indian, Negro, and mixed, as well as from old stock, families. Racial and ethnic differences have never caused a problem.

The center provides a library of 1,450 donated books, classes in metal, leather, and wood crafts, lessons on string instruments and the piano, a cooking school for boys and girls conducted by the policewomen, table games, outdoor shower for summer cooling-off, a skating rink in winter, boxing and basketball in the rear yard, equipment for competitive team sports played on the schoolground nearby, occasional entertainment, a Cub Den and a Boy Scout Troop, a plan whereby youngsters working on maintenance and improvements earn money payable in

²² Condensed from R. Strang, "First Steps to Progress in the Prevention of Delinquency," *Forty-Seventh Yearbook of the National Society for the Study of Education*, 1948, Pt. I, pp. 267-269. Quoted by permission of the Society.

stamps which can be cashed in for schoolbooks, shoes, clothing, scouting equipment, athletic equipment, etc., a self-government plan in which children hold positions of mayor, judge, police commissioner, librarian, etc.

In 1942, land was purchased a few miles from Grand Rapids for a camp site. The property was prepared and equipped for a diversified program, and by the season of 1943 more than a hundred young people had attended for successive periods of ten days each. Since then the camp has become an established feature of the over-all program of the center.

The Grand Rapids Youth Commonwealth, Inc., embodies a number of important principles. It has concentrated its program in an area known to have a high percentage of vulnerable youth. It has made effective use of the resources already existing in the neighborhood and the city. These resources include nearby school property, equipment, and books, the Methodist Mission, adjacent land for family gardens, personnel from various youth organizations, and other agencies and resources. It has placed great stress on the contribution of the young people themselves; their leadership, responsibility, and enthusiasm are immeasurable assets to the program. This enterprise has also thrown new light on the preventive job of police officials; in Grand Rapids, Captain Winslow, Sergeant Deming, Chief O'Malley, and their associates are more distinguished as leaders of youth than as apprehenders of youth who have gone astray. Finally, it has shown that a basic attack on delinquency requires a strong, positive program for all youth in the area served.²³

To such a program as this one the writers would add some method of early identification of predelinquents and an intensive effort to alter their personality structure before the traits become too deeply embedded. With a joint attack, one should get results.

Summary

Delinquents differ from nondelinquents in a number of different traits. As a group they have a somewhat lower intelligence, they are retarded still more in their educational development, they dislike the traditional school, they are markedly overactive, and they are not content with modes of emotional expression that other children find adequate. They show a high degree of hostility, aggressiveness, and suspicion. Their typical escape from their frustrations consists in making an attack upon their environment. Their homes are usually undesirable, not so much because of poverty as because of emotional tensions of various kinds. From the neighborhoods in which they live they derive standards of behavior that put a prestige value upon delinquency. They come from neighborhoods in which lawbreaking, among both adults and juveniles, is an accepted mode of behavior. The frustration that lies at the basis of much delinquency comes in large measure from restrictions and attitudes arising from these various background factors,

²³ H. Y. McClusky, "How Community Agencies May Help with Problems of Delinquency," *Forty-Seventh Yearbook of the National Society for the Study of Education*, 1948, Pt. I, pp. 205-206. Quoted by permission of Society.

although individual children naturally differ greatly in the nature of their reactions to environment

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PART FIVE

Moral Development

20

Growth in Attitudes

The present chapter contains a number of sections, each of which contributes something to an understanding of growth in attitudes, habits, personal traits, and ideals that, taken together, constitute development in morality. Investigators have measured all kinds of attitudes with more or less success. The writers have limited the discussion to a relatively few topics upon which research has been especially fruitful and interesting, and have selected only two or three illustrative studies for inclusion in each section. The first section deals with conservatism and liberalism at different ages and with changes over periods of time, the second section contains discussions of the usual developments in the establishment of prejudice, of the extent of prejudice toward various minority groups, of their reaction toward the restrictions placed upon them, and of attitudes toward foreign nations and peoples, the third deals with the changes in the type of person most admired at different ages. The following chapter will discuss problems of religious attitudes, the extent of church affiliation among adolescents, the growth of generalized ideas of right and wrong, and the adolescent beginnings of a philosophy of life. Together, these two chapters should present a picture of the moral attitudes and ideas of youth.

Typical Liberal or Conservative Attitudes

It is a commonplace that young people tend to be more liberal—if not actually radical—than older people, and that those who were once liberal tend to develop a conservative attitude as they grow older. It is, however, probable that other forces than mere age are of importance in conditioning these points of view.

In general, adolescents tend to follow the pattern of attitudes held by their parents, even to favoring the same political parties. In one study 74 per cent of the boys belonged or intended to belong to the same party as their fathers, and 76 per cent of the girls to the same party as their

mothers¹ In the relatively few cases of divergence from the parents' political views, the cause seemed to be not so much a difference of opinion as an expression of rebellion and hostility toward the parents Apparently, some adolescents feel that becoming a Democrat is a revolt against two Republican parents! Or vice versa

One investigator in 1950 followed up over nine hundred adults who were college students in one of sixteen colleges in 1936 and administered again to them a test of attitudes that they had taken as students² In the intervening fourteen years the changes shown in Table 44 had taken place

Table 44 SHIFTS IN ATTITUDES, 1936 TO 1950

	%
No shift	18
Toward conservatism	31
Toward radicalism	51

These figures seem to contradict the usual assumption that people become more conservative with age, but these retested students were still under forty Perhaps the conservatism will set in later Also, they were of the generation that was interested in the "Russian Experiment" On both tests, students or adults from the South were more conservative than those from the North.

The degree of conservatism or radicalism is related directly to occupational, economic, and social status, as revealed by Figure 124, which gives results from groups of adults The heads of large businesses tended strongly to be conservative, and over half of them were ultraconservative Skilled laborers evidently were not sure which side they should be on The semi-skilled were inclined to be radical, as were the unskilled, if they had an opinion This figure reflects the usual attitudes of the "haves" and the "have-nots" Those whose income and prestige depend upon a perpetuation of the *status quo* are opposed to change The tendency toward radicalism begins with the laboring groups, who might profit by change, but many of them do not seem to be at all sure that a change would do them any good In general, America is too economically comfortable a country for the growth of ultraradicalism.

Racial Prejudice: Its Nature, Causes, and Expression

There is a great deal of material about attitudes toward minorities, presumably because this problem is such an important one in present-day

¹ E E Macoby, R S Matthews, and A S Morton, "Youth and Political Change," *Public Opinion Quarterly*, 18 23-39, 1954

² E N P Nelson, "Persistence of Attitudes of College Students," *Psychological Monographs*, Vol LXVIII, no 373, 1954, 12 pp

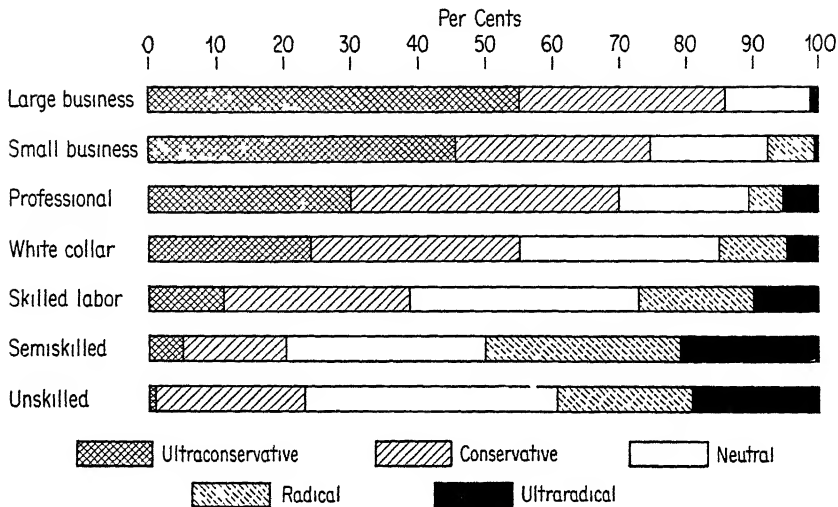


Fig 124 *Attitudes and Social Class*

Based on R. Centers, *The Psychology of Social Class*, Princeton University Press, 1949, p. 57

American culture. In order that a teacher may see her role and that of the school in the prevention of intolerance, it seems best to begin the discussion by giving a brief explanation of its bases, its growth, its nature, and its causes.

Social Background of Intolerance. America is often and fondly referred to as the "melting pot." To it have come members of all races, nationalities, political faiths, and religious beliefs. Up to a point there has been the kind of assimilation that was expected, but it has now become obvious that some of the ingredients that went into the pot show little inclination to melt. If fusion is to take place there has to be a desire on the immigrant's side to become Americanized and on the American side to absorb the newcomer. Sometimes the immigrant wishes to remain apart. The orthodox Jew, for instance, vehemently resists absorption and mourns as he sees his children, his grandchildren, and his great-grandchildren depart ever more and more from ancestral customs. Sometimes the aversion is mutual. Thus the small groups of Portuguese fishermen who settled nearly a century ago here and there along the coast of Maine wanted no truck with the native Yankees, who, in turn, regarded the Portuguese as a low order of humanity. Often, but not always, the prejudice is on the American side, as in the rejection in the West of the Japanese, who wanted desperately to be Americans. In the course of centuries, the problem of interracial adjustment is likely to solve itself through biological assimilation, and the discordant elements will disappear into the general population through

intermarriage, just as the Indians of many former tribes have been absorbed, or as the Roman Empire absorbed the surrounding barbarians. This long view, however, does not offer much that is practical in the easing of present-day tensions.

The elements of the population that are proving most difficult to assimilate—in all parts of the country—are the Negroes, the Orientals, and the Jews. In limited areas, the Mexicans, French Canadians, Irish, Germans, Italians, Portuguese, and Poles are also proving resistive to absorption. Certain religious groups fight against assimilation—the Dunkards and the Mormons, for instance—as do a few political groups, of which the Communists may serve as an example. The Negroes, Japanese, Chinese, Filipinos, and Indians present racial variations that are of a fundamental nature. The biological differences remain even after the descendants of the original immigrants have become as Americanized as the Bostonian of purest Anglo-Saxon ancestry, and these differences mark off the individual and make him “feel different,” a basic attitude that easily leads to submission in a timid soul and to violence in an aggressive one. Further differences between national groups are social, political, ethnological, religious, or economic, all of which are acquired by the respective groups through social tradition. They become almost as ineradicable as inborn differences between races, however, and are actually just as potent in causing prejudices as are inherited traits, although aversion may be centered upon the latter.

Intolerance of one group of people for another is as old as written history, but several recent developments have tended to create new tensions between groups and to reawaken old ones. World War II intensified antagonisms tremendously, because the need for millions of workers threw together people of all races and national extractions without providing instruction in how to get along together. Thus, in one manufacturing center, the Negro population increased, between 1941 and 1943, seventeen times as fast as it had been increasing from 1930 to 1940, whereas the white population grew much more slowly.³ Consequently, there were more chances for contact between the races, especially as the Negroes spilled out of their previous district and began to compete with whites for living quarters. Competition for high wages produced additional tension. Since the country needed, above all, able-bodied soldiers and workingmen—especially in the skilled trades—it became necessary to permit Negroes, the largest single unassimilated group, to enter many fields that had never been open to them before. In the Army they became fliers and officers, in industry, if they had the necessary abilities, they were advanced farther and faster than usual, as civilians, they occupied many voluntary positions of respon-

³ D. W. Baruch, “Some Aspects of Discrimination in a War Area,” *American Journal of Orthopsychiatry*, 14: 714-721, 1944.

sibility in the Red Cross, and the like. The war record of the Negroes is one to be proud of. Their expanding activities brought them into more and more frequent clashes with white people. Like any other group, they need an acceptance of themselves by others, an equal opportunity for progress, a recognized and satisfactory social status, and a reasonable degree of security.

Development of Prejudice A fanatic intolerance, being a form of projection, is one means of escape from emotional difficulties. The growth of a prejudice runs about as follows:⁴ (1) An individual is frustrated in his efforts to satisfy his basic needs, is rejected and neglected, (2) he feels insecure and defenseless, he wants at least enough power to defend himself and, by preference, enough to compensate for his past and present low status, (3) he feels hostile toward almost everyone, but he cannot express his hostility toward those who are more powerful than he is, in any more active way than wishing them ill or grumbling about them. What he needs is a victim who is accessible and in no position to fight back. (4) The individual then displaces his hostility from its natural objects to his victim. If, at the same time, he is subjected to propaganda and furnished with ready-made attitudes, his prejudice develops faster than it otherwise would, because it is reinforced from without. (5) The prejudiced person is now ready to commit an act of aggression, and will do so when outside stimuli prompt him. By this series of reactions the fanatic has rid himself of his emotional burden. He no longer feels helpless, because he has someone to attack, and he is no longer isolated, because he can ally himself with others of the same opinions and attitudes. (6) As a final stage, the fanatic adds reasons and justifications for his intolerance. This step is necessary in proportion to the fanatic's intelligence. If he has an otherwise logical and able mind, it soon tells him that he has no sensible reason for hating the people he does. Since this notion, if listened to, would reduce his prejudice and bring back his former state of insecurity, he makes haste to bolster his emotional attitude with "good" reasons. This step is always possible because no group is perfect, as long as one likes the members, or most of them, one overlooks the shortcomings, but as soon as one begins to hate the members, the faults are not hard to find. When a fanatic is queried about his prejudice, he justifies it with his "reasons," which actually came at the end of the process, not at the beginning, as he probably thinks. He is usually not aware that the early steps were parts of the development. It should be noted that the basic causes of prejudice are emotional and have no necessarily integral connection with whatever group the prejudice is directed against. It is this lack of logic, plus the factitious logic of the superimposed justification, that makes intolerance so hard to "cure." Moreover, the prejudiced person's ego clings to his in-

⁴ M. F. A. Montague, "Some Psychodynamic Factors in Race Prejudice," *Journal of Social Psychology*, 30 175-187, 1949.

tolerance in sheer protection because it keeps him from sensing his own inferiorities

The above account outlines the stages in the development of prejudice in a person who received little or no help from others. Actually, most people short-circuit the process by imitating attitudes that they observe in people whom they admire or love. Thus, pupils' attitudes and those of the teachers agree more than they would by chance, and children's attitudes resemble closely those of their parents.⁵ Adolescents, especially, imitate the opinions of their age-mates. An individual who is in the frustrated, insecure, hostile frame of mind that is the forerunner of prejudice can soon find in his environment people with already congealed attitudes and opinions. In addition to his family, teachers, and friends, the movies, the radio, books, and television are constantly presenting him with possible fixations. Society thus furnishes the models, which do not seriously affect those who have no need of them but are accepted uncritically by those who, for their own emotional comfort, need someone to project their frustrations upon.

*Stereotypes and Scapegoats*⁶ Most people develop stereotypes for the nationalities or races with which they come into contact. They generally assign to the groups they like the traits of which they approve and to the groups they dislike the traits of which they disapprove. Also, they tend to reject their own least acceptable traits when they think they recognize them in others.⁷ A stereotype usually has or has had some slight basis in fact, but the fact may or may not have been relevant. For instance, one of the writers remembers one sentence from a childhood geography which gave the following stereotype: "The French are a gay people, addicted to light wines and dancing." This entire concept is presumably based upon the kind of entertainment furnished by enterprising Parisians to American tourists, upon the assumption that gaiety was a desideratum. At the time the geography was written the French were certainly "addicted to light wines" because their water was not potable. Certain facts thus served as a basis for the stereotype, but they were irrelevant.

The American stereotype of the Negro describes him on the negative side as being uneducated, lazy, stupid, ignorant, immoral, overassertive, unstable, and dirty, and ascribes to him on the positive side a genuine interest in religion, a cheerful disposition, a pleasant singing voice, a superior sense of rhythm, and a good deal of dancing ability. This concept also has or has had some basis in fact. As long as Negroes were slaves, they were

⁵ M. Weltman and H. H. Remmers, "Pupils', Parents', and Teachers' Attitudes: Similarities and Differences," *Purdue University Division of Educational Reference, Studies in Higher Education*, no. 50, 1946.

⁶ See G. W. Allport, *ABC's of Scapegoating*, Anti-Defamation League of B'nai B'rith, rev. ed., 1948, 56 pp.

⁷ Montague, "Some Psychodynamic Factors in Race Prejudice," *loc. cit.*

kept ignorant on purpose, and they were often lazy because slaves have little motive to be anything else. They were uneducated, and many southern Negroes still are, because the schools and teachers provided for them were inadequate, but wherever the same educational facilities are open to them, they have reached the same levels as white Americans. They appear to have the same range of intelligence as any other racial group. Surely a race that stepped out of slavery only a hundred years ago and in that short period has reached its present level can hardly be regarded as being inherently stupid. It is, of course, true that individual Negroes may have one or more of these negative traits, but so also do individual white people. It is not surprising that Negroes are usually religious, for religion is the refuge of those who need it and serves the black man as an emotional outlet for his many frustrations. Another outlet is supremacy in athletics, one line of endeavor in which the Negro meets with much less discrimination than in other fields.

Stereotypes of similar nature but with emphasis upon different traits exist for the Jews, who have formed an "out-group" in almost all cultures, largely because their religion has always led them to resist absorption. The feelings of inferiority aroused by intolerance are usually revealed only through the Jew's frequent overcompensation. According to the stereotype, he pushes himself forward—lest he be overlooked—fawns upon those who can help him to be accepted socially, and puts his trust in money as a source of power. He is also considered to be clever, deceitful, overambitious, and sly. Because Jews are commonly successful in material matters, they arouse envy, which Negroes do not. The prejudice against them is therefore strengthened by their success.⁸

It is a curious fact that in Europe, where there are practically no Negroes, the stereotype of the Jew is almost exactly that of the American Negro in America. Since the two stereotypes of the Jew, as they exist in America and Europe, almost completely contradict each other, it is clear that the source of both is in the prejudiced person, not in the object of his intolerance.⁹

Members of a dominant group in a society feel safe and superior because they belong to the party in power at the moment. That is, they are members of the "in-group." In order to maintain their safety and security, those in the "in-group" have to do some things of which they cannot be proud, things that make them feel guilty, things that disturb them. These fears build up within the members of the in-group a degree of tension that gradually becomes unbearable. They therefore project their guilt, anxiety,

⁸ B. Bettelheim and M. Janowitz, *Dynamics of Prejudice: A Psychological and Social Study*, Harper & Brothers, 1950, 227 pp.

⁹ W. Buchanan and H. Cantrel, *How Nations See Each Other*, University of Illinois Press, 1953, 220 pp.

uncertainty, or whatever strain needs to be reduced, upon members of one or more "out-groups," making them the scapegoats, thus discharging their own tensions. Once a proper scapegoat is found, it can serve for the discharge of future anxiety, fear, guilt, or hostility. After enough specific instances pile up, the basic attitudes harden into a prejudice, which is socially sanctioned by the majority of those belonging to the in-group,

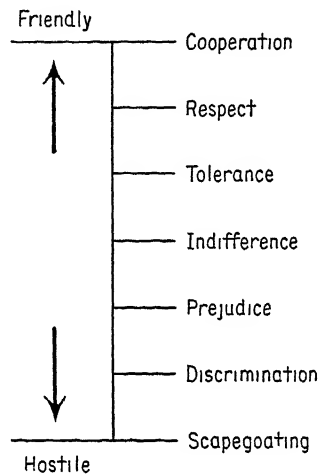


Fig 125 *Range of Attitudes toward Racial or Ethnic Groups*

From G. W. Allport, *ABC's of Scapegoating*, Anti Defamation League of B'nai B'rith, rev ed., 1948, p. 11. Used by permission of the League.

members of which are always conservative, since the last thing they want is a change in the *status quo*. Once established and sanctioned, a stereotype is passed down from one generation to the next. Stereotypes are especially pernicious because they are so crystallized that they are hard to modify, and they provide their holder with both a shield against the assault of new facts and a theory in the light of which he can interpret such facts as are too clamorous to be ignored.

It should be understood that scapegoating¹⁰ has inevitably an aggressive content. It is an extreme position at the lower end of a scale that represents the possible varieties of human intergroup attitudes. Such a scale appears in Figure 125. The word "prejudice," used for the first level of negative feeling, implies an emotion not strong enough to lead to overt behavior. For the next lower level, the word "discrimination" has been used. This word implies action against a group. In everyday speech it refers to such actions as preventing Negroes from voting, closing certain apartment houses to Jews, requiring Negroes to attend separate schools, and so on. These

¹⁰ For good definitions of scapegoating, see E. K. Taylor and J. H. Rey, "The Scapegoat Motive in Society and Its Manifestations in a Therapeutic Group," *International Journal of Psychoanalysis*, 34:253-264, 1953.

actions are directed against certain groups, but they are not usually accompanied by violence. The word "scapegoating" appears at the bottom because it indicates not merely an extreme of prejudiced feeling, but also an increase in hostility and violence, and a tendency to react toward individuals as well as toward groups.

The reaction of the out-group to its exclusion may take several forms. Its members may docilely comply with the restrictions set upon them and resign themselves to being unwanted. One sees this attitude among many of the Untouchables of India. Or they may seek protection from the worst of their wrongs by allying themselves with prominent individuals of the in-group. Thus, during the prewar and early war years in Germany, many Jews escaped persecution through individual alliance with powerful non-Jewish figures. A third and very common reaction is to close their ranks and live among themselves, ignoring others as they are ignored. One sees this in the Chinatowns, the Harlems, and the ghettos. Finally, they may fight back. The most conspicuous modern example of this reaction is furnished by the Israelis. After centuries of trying to solve their problems by not attracting attention to themselves, they seem to have decided to stand and fight.

The Intolerant Individual. The typically prejudiced person comes from a family in which the discipline was strict and arbitrary. The parents put great emphasis upon outward forms, conventional standards, and social status, but did not show much affection toward the child.¹¹ They were more concerned with mores than with morals and tended to be superior about whatever was "theirs"—their church, their home, their social set, their school, their clubs, and so on. The child identified himself early with his parents and eventually idealized them, taking over from them their glorification of whatever group they belonged to, their devotion to appearances, their rigidity of thought, their lack of emotion, and their absence of moral convictions. By the time such a child has reached adolescence, he has acquired a good enough adjustment on the surface. He is polite, self-confident, optimistic, conventionally moral, and kind, when kindness is no particular trouble. He is markedly conservative, mentally rigid, and fanatically loyal to his own group.¹² He admires power, is a social or political climber, and

¹¹ E. Frenkel-Brunswick, "Family Patterns and Ideology," *American Psychologist*, 3: 350, 1948, and "A Study of Prejudice in Children," *Human Relations*, 1: 295-306, 1948.

¹² R. Gordon, "Personal Dynamics and the Tendency toward Stereotypy," *International Social Science Bulletin*, 6: 571-576, 1954. See also N. W. Ackerman and M. Jahoda, *Anti-Semitism and Emotional Disorders*, Harper & Brothers, 1950, 135 pp.; W. Adorno, et al., *The Authoritarian Personality*, Harper & Brothers, 1950, 982 pp.; F. H. Cordei, "A Factorial Approach to Anti-Democratic Activities," *Purdue Studies in Higher Education*, 1954, no. 82, 42 pp.; S. Crown, "Some Personal Correlates of War-Mindedness and Anti-Semitism," *Journal of Social Psychology*, 31: 131-143, 1950; E. Frenkel-Brunswick and R. N. Sanford, *The Anti-Semitic Personality*, Harper & Brothers, 1950, pp. 26-124; R. Stagner, "Attitudes toward Authoritarianism: An Exploratory Study," *Journal of Social Psychology*, 40: 197-210, 1954.

believes in harsh punishment for misdeeds. He has an unusually deep need to feel superior to others. He solves his daily problems by projecting the blame for his difficulties onto someone or something else. He is markedly lacking in ability to love but is well equipped with suspicions, incipient hatreds and callousness toward those outside his own narrow group. He is usually a member of "the best church in town" and may give generously to its support—partly because it is "his" church and partly because he likes the increased status that follows the gifts—but he misses the spiritual values of religion. He has many unsolved conflicts, his stereotype is a defense against the anxieties that arise from his maladjustment to society. Since he is already rigid, righteous, and unfeeling, he is ready for violence, sadism, or hostility, the extreme to which he will go being governed mainly by his deep regard for his status. If he can become anonymous behind the sheets of the Ku Klux Klan, his aggressive cruelty may slip the leash completely. Since the typical fanatic has been slowly becoming one ever since he left the cradle, it is not surprising that he is hard to "cure." Like the delinquent his disease is his way of life. Not only does he have great difficulty in changing his attitudes, he does not even want to change them.

It is unfortunately true that those adults who maintain their church affiliation and attend services regularly are more prejudiced than those who have no contacts with established religion.¹³ It is not, however, clear which is cause and which is effect. To the writers it seems probable that people are not prejudiced because they go to church but that they go to church because they are motivated by a need for support that is also at the bottom of their prejudice. A true follower of Christian doctrine, whether allied to a church or not, cannot be brought to hate his fellow man. Many who become church members, however, need chiefly security, the projection of guilt upon others is another means of gaining the same end. It is therefore not surprising that the two traits are related. Incidentally, there is no difference between Catholics and Protestants in this respect.¹⁴

Some light is thrown upon the causes of attitudes by two studies,¹⁵ one made in 1931 and one in 1944—toward the end of World War II. The pupils in both studies were in the sixth grade and had an average age of twelve but an average mental age about two years higher. The effect of the war upon attitudes toward the United States was to eliminate the last doubters. Toward the main enemies the attitude was only fair even in

¹³ C. T. O'Reilly and E. J. O'Reilly, "Religious Beliefs of Catholic College Students and Their Attitudes to Minorities," *Journal of Abnormal and Social Psychology*, 49 378-380, 1954, R. N. Sanford and D. J. Levinson, "Ethnocentrism in Relation to Some Religious Attitudes and Practices," *American Psychologist*, 3 350-351, 1948.

¹⁴ H. J. Parry, "Protestants, Catholics, and Prejudice," *International Journal of Opinion and Attitude Research*, 3 205-213, 1949.

¹⁵ R. Seligs, "Children's Concepts and Stereotypes of American, Greek, English, German, and Japanese," *Journal of Educational Sociology*, 28 360-368, 1955.

1931, toward Germany some resentment from World War I presumably lingered, and toward the Japanese there was some racial prejudice. However, actual dislike was expressed by less than a third of the pupils in 1931. In 1944 expressed dislike soared to approximately 80 per cent in both cases. These results are summarized in Figure 126.

One interesting article reports an investigation into the attitudes of those who expressed a desire to live abroad and those who had no urge to do so. Two facts emerged from the results.¹⁶ Those with an interest in

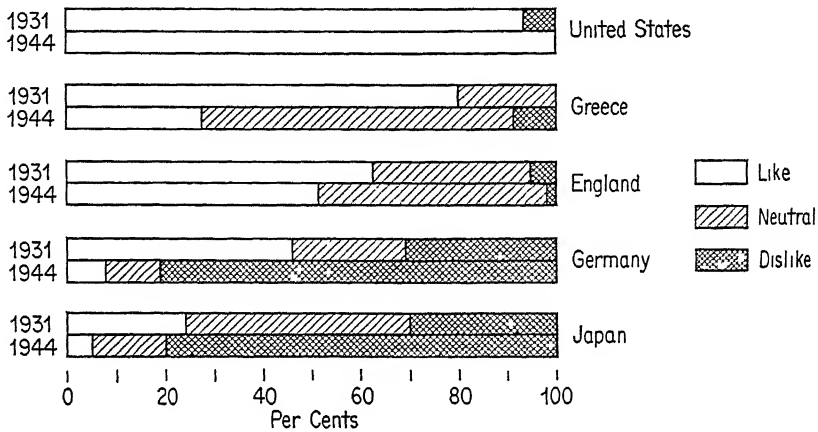


Fig 126. *Changes in Attitudes, 1931-1944*

Based on R. Seligs, "Children's Concepts and Stereotypes of American, Greek, English, German, and Japanese," *Journal of Educational Sociology*, 28: 360-368, 1955.

living abroad had a low self-esteem, reflecting perhaps their inability to adjust themselves to the American social scene. Second, there was a great similarity between their rating of their own personal traits and the ratings of certain foreign groups. That is, their personality "profile" matched that of foreigners better than it matched that of Americans. Quite possibly their urge to live abroad arises from some appreciation of the fact that they would "fit" better into a society composed of other individuals having similar patterns of personality.

The case study below summarizes some of the points from the previous discussion of background and personality.

Mr. R. is a man of fifty-five who expresses a violent anti-Semitic attitude. He asserts that Jews are exploiters of others, Christ-killers, and fakers, that they are dishonest, that they sell second-rate goods at high prices, that they are too successful, too rich, and too powerful. Mr. R. will not work for a Jewish employer or for a

¹⁶ H. W. Perlmuter, "Relation between the Self-Image, the Image of Foreigners, and the Desire to Live Abroad," *Journal of Psychology*, 38: 131-137, 1954.

firm that employs Jews. He criticizes President Roosevelt for having been too friendly with Jews and he praises Hitler's anti-Semitism and regrets that a few European Jews escaped death.

Mr. R. is the son of a Presbyterian minister who ruled his numerous children with an iron hand. The atmosphere of the home was intensely and narrowly religious, permeated with the gloomiest of Calvinism. The father threatened his sons and daughters with hell-fire for minor transgressions and thrashed them for major deviations from what he considered proper conduct. The other three boys eventually escaped from their father by running away from home, and the girls all married at an early age, two of them eloping with suitors who had been sent away by the father in a dictatorial manner. Mr. R. was always terrified of his father, but at the same time he admired him for his strength and power. On the whole he conformed better to requirements than any other member of the family and never revolted openly against authority.

In the Jews Mr. R. has found a convenient target for the hatred he has for his father. They, like his father, are strong, successful, and powerful. Moreover, he can hate them without danger to himself, whereas he never dared to express openly his hostility toward his father. They are only substitutes, but they permit him to escape from the inferiority that he would otherwise feel because he lacks the courage to flee from parental domination. His hatred is great because his need is great.

Typical Degrees of Prejudice Shown by Children and Adolescents

What might be called the "normal" growth of attitudes toward two minority groups, the Negroes and the Jews, is shown by two studies that extended from the early grades through high school or college.

In one investigation, made before the Supreme Court's order to desegregate schools, 1,065 children and adolescents were asked to vote for one of three possible treatments of Negroes: a continuance of segregation, more opportunity for them than was customary, equal opportunity with whites.¹⁷ For the entire group, the percentages were 66, 14, and 18, respectively, for the three typical attitudes enumerated above, with 2 per cent not voting. In the elementary school, 71 per cent favored segregation, in the high school, 66 per cent; and in college, 55 per cent. Part of the decrease is certainly due to mere elimination of the less intelligent pupils, but one does not know how much. In the second study, pupils from Grades 5 through 12 wrote compositions on "What Is an American?" "What Is a Jew?" and "What Is a Negro?"¹⁸ The topics were given as a routine assignment, without special preparation or reading. It is interesting, incidentally, that criticism of the United States made a spontaneous appearance in these productions, increasing from 6 per cent in Grade 5 to 21 per cent in Grade 12. More pupils actively opposed discrimination than actively supported it. Some per cent

¹⁷ R. Centers, "Attitudes and Beliefs in Relation to Occupational Stratification," *Journal of Social Psychology*, 27 159-185, 1948.

¹⁸ M. Radke and J. Sutherland, "Children's Concepts and Attitudes about Minority and Majority American Groups," *Journal of Educational Psychology*, 40 449-468, 1949.

between 2 and 13 volunteered the information that they liked either Jews or Negroes and a similar range volunteered a dislike, in high school a few students (1 to 5 per cent) stated that they "hated" Negroes and from 3 to 6 per cent that they "hated" Jews. Those who read the compositions classified the characteristics imputed to each group as favorable, inferior, bad, or unique. The percentages in each grade appear in Table 45. These par-

Table 45. CHARACTERISTICS IMPUTED TO NEGROES AND JEWS

(The figures are percentages.)

Characteristics	Negroes Grades				Jews Grades			
	5-6	7-8	9-10	11-12	5-6	7-8	9-10	11-12
Favorable	34	36	27	21	20	13	13	16
Inferior	26	41	39	67	4	4	3	8
Bad	0	18	23	27	50	45	69	80
Unique	22	10	12	25	22	21	7	5

Based on M. Radke and J. Sutherland, "Children's Concepts and Attitudes about Minority and Majority American Groups," *Journal of Educational Psychology*, 40:449-468, 1949.

ticular pupils regarded Negroes mainly as inferior and different rather than bad, and Jews as bad but not inferior. The percentage of favorable comments decreased with age. Some children and adolescents expressed a favorable attitude toward both groups, others had a prejudice against only one, and some expressed intolerance toward both. The per cents appear in Table 46. Prejudice increases, and those who feel it toward one group tend to feel it toward the other also.¹⁹

Table 46. CHANGES IN TOLERANCE TOWARD NEGROES AND JEWS

(The figures are percentages.)

	Grades			
	5-6	7-8	9-10	11-12
Favorable to both Negroes and Jews	54	47	32	32
Favorable to one group but not the other	29	20	20	8
Negative to both groups	17	33	48	60

Based on Radke and Sutherland, "Children's Concepts and Attitudes about Minority and Majority American Groups," *loc cit*.

Prejudice against Negroes begins early and is sensed by young members of both races. A very interesting experiment consisted in letting kinder-

¹⁹ See also E. T. Prothro, "Ethnocentrism and Anti-Negro Attitudes in the Deep South," *Journal of Abnormal and Social Psychology*, 47:105-108, 1952.

garten and first-grade children play with a Negro doll and a white doll, a new, brightly painted house that the dolls could be placed in, a shabby house of similar size, a set of "dress-up" clothes for each doll, and a set of ragged, dirty clothes²⁰ Each child's play was watched. If he did not place the dolls in the houses or dress them voluntarily, the investigator asked him which doll lived in which house or which doll wore which clothes Among the 152 white children, 77 per cent put the white doll into the new house, among the 90 Negroes 60 per cent also did so When handed the Negro doll and asked which house it lived in, 73 per cent of the whites and 67 per cent of the Negroes assigned it to the ramshackle house Sixty per cent of the white children dressed the white doll better than the Negro doll, while 63 per cent of the Negro children dressed the Negro doll better than the white doll When they were asked why they assigned which house to which doll, 16 per cent of the whites and 5 of the Negroes expressed already formed prejudices and 34 per cent of the whites and 22 per cent of the Negroes implied a prejudice That is, at the kindergarten level, half of the white children were already aware of racial discrimination It will be noted that these small children expressed their attitudes not in words, but in deeds

Effect of Discrimination upon Individuals and upon Groups A number of emotional reactions have been noted among individual members of minority groups, especially among Negroes and foreigners who have been subjected to discrimination by a white or native majority. Some Negroes are openly hostile and aggressive toward white people and are inordinately proud of their own race, others reject their own people and toady to the white race in an effort to be so useful as to escape the general dislike, still others merely accept things as they are and avoid contacts with whites when possible, most, however, are unhappy, discouraged, and frustrated but have not reached the point of aggression²¹

In one study a large number of Negroes were asked if they had felt racial discrimination²² A few reported that they had never experienced any humiliation based on racial discrimination, but most reported the appearance of prejudice at about the age of twelve, relatively little was felt during the childhood years The situations in which discrimination appeared were social in character The most frequent reaction on the part of the Negroes was a complete withdrawal from companionships, clubs, or other activities requiring social relationships with white children The realization of preju-

²⁰ M J Radke and H G Trager, "Children's Perceptions of the Social Roles of Negroes and Whites," *Journal of Psychology*, 29 3-33, 1950

²¹ O Verin, "Racial Attitudes of Negro Clients," *Smith College Studies in Social Work*, 34 795-798, 1946

²² A S Beckham, "A Study of Attitudes of Negro Adolescents," *Journal of Abnormal and Social Psychology*, 29 18-29, 1934 See also J H Atwood, *Thus Be Their Destiny*, American Council on Education, 1941, 96 pp., for excellent individual accounts of emotional reactions to discrimination

dice against themselves was a severe blow to the Negroes' sense of security. Most of those involved in the study reported profound resentment against white pupils, with a consequent increase in the emotional attachments formed with adolescents of their own race. Nearly half the Negroes felt that their white teachers discriminated against them by seating them in the back of the room, ignoring them, grading their papers unfairly, refusing them opportunities for classroom leadership, and excluding them from extracurricular activities.

The kinds of difficulty reported by Negro children and the frequency with which these difficulties are encountered are shown in Table 47, which

Table 47: TYPES OF DISCRIMINATION REPORTED BY SCHOOL CHILDREN

<i>Types</i>	<i>Per Cent</i>
Ridicule	71
Indirect disparagement	54
Aggression	40
Discrimination	31
Rude remarks	17
Physical abuse	10

From R. M. Goff, "Problems and Emotional Difficulties of Negro Children," *Teachers College Contributions to Education*, no. 960, 1949, 93 pp. Used by permission of the publisher.

rests upon the testimony of 150 elementary school pupils. Their reactions to the treatment they received consisted of resentment (69 per cent), inferiority, shame, hurt feelings, or embarrassment (47 per cent), and fear (6 per cent). Only 3 per cent remained indifferent. Their first impulse was either to accept the discrimination stoically or to fight, either actually or verbally. Their permanent solution was a voluntary and complete withdrawal from white children, in order that future situations which might make them uncomfortable should not arise. This preference of white pupils for white companions and Negroes for Negroes increases as the children reach adolescence and often continues to increase into adult life.²³

Jewish as well as Negro children also usually experience prejudice before the end of their elementary school days. The Gentile children strongly tend to select their best friends from among their own group—to the extent of 94 per cent—thus rejecting their Jewish age-mates except as casual acquaintances.²⁴ Jewish boys react to this situation by establishing friendships with other boys of the same faith, but Jewish girls often try to escape from prejudice by seeking social acceptance among Gentile boys and girls.

²³ H. C. Koch, "The Social Distance between Certain Social, National, and Skin-Pigmented Groups," *Journal of Genetic Psychology*, 68 63-95, 1946.

²⁴ A. Harris and G. Watson, "Are Jewish or Gentile Children More Clannish?" *Journal of Social Psychology*, 24 71-76, 1946.

Foreign groups have similar experiences. A study of two thousand eleven- to fifteen-year-old children of Italian-born parents shows that rejection by the majority group occurred and had definite effects upon personality. These children manifested feelings of inferiority, awareness of their rejection, poor social adjustment, and emotional instability.²⁵ If the feeling of frustration becomes sufficiently deep and permanent, serious maladjustment, delinquency, neuroses, and psychoses may result.

Reduction of Prejudice Various people have attempted to reduce the amount of already measured prejudice in a given group. The logical assumption was that an intolerant person will lose his negative attitudes once he is given adequate information about, and adequate contact with, those whom he dislikes. The matter is, however, not so simple, because prejudice rests upon emotional rather than intellectual grounds. There seems to be practically no relationship between knowledge of and feeling toward a group,²⁶ and an already established prejudice is reduced only a little if at all by supplying facts to counterbalance it. In one study of the opinions and attitudes shown by 2,523 white people with varying degrees of formal education, the relationship between the last grade to be reached in school and information about Negroes was positive but that between educational level and attitude was zero.²⁷ In other words, increased education gave information about Negroes, their problems, and the conditions under which they lived but failed to dent basic attitudes. Specific teaching in a college course on race relations may modify prejudices slightly, although work in other courses in sociology seems to have no effect.²⁸ In some cases, both age and instruction seem to be related negatively to the degree of prejudice shown.

Another favorite suggestion for the reduction of intolerance between races has been the establishment of personal contacts between individual members of two cultures. This idea is just a variation on the theme that prejudice is due to ignorance and will disappear if one becomes acquainted with members of a disliked group. Simple contact does not, however, prove effective, and it sometimes increases rather than decreases prejudice. In one actual experiment of having Negro and white boys in the same summer

²⁵ J. W. Tait, "Race Prejudice and Personality," *School*, 34 795-798, 1946, and R. L. Cooper, "The Frustrations of Being a Member of a Minority Group: What Does It Do to the Individual and to His Relationships with Other People?" *Mental Hygiene*, 29 189-195, 1945.

²⁶ See, for instance, G. Nettler, "The Relationship between Attitude and Information concerning the Japanese in America," *American Sociological Review*, 11 177-191, 1946, and B. Shimberg, "Information and Attitudes toward World Affairs," *Journal of Educational Psychology*, 40 206-222, 1949.

²⁷ B. Samuelson, "Does Education Diminish Prejudice?" *Journal of Social Issues*, 2 11-13, 1945.

²⁸ M. Smith, "A Second Report on Changes in Attitudes toward the Negro," *School and Society*, 57 388-392, 1943.

camp, the boys of both races who were already frustrated, inclined to aggression, and defiant of authority, became more intolerant than before²⁹ There was, at the same time, a decrease in prejudice among those who already had many friends, were well adjusted, and showed few signs of aggressive needs The contact in this instance acted selectively, having its greatest influence where it was least needed Obviously, if contact alone were enough, some of the most deep-seated cases of intolerance would never have arisen There is more daily contact between whites and Negroes in the South than in the North, but the intolerance is higher What does seem to have some effect is acquaintanceship with *superior* members of another group³⁰ Thus a concert by Marian Anderson or a commencement address by Ralph Bunche is more likely to modify anti-Negro prejudice than daily contact with the Negro men who collect the trash

Two especially interesting experiments in the "contact" approach of reducing prejudice have been reported One of these mixed contact with certain forms of instruction, while the other depended upon contact alone³¹ In the former instance, the investigator first selected a group of high school students who had strong anti-Negro feelings These boys and girls became acquainted with a number of attractive, intelligent, interesting Negroes who talked vividly and pleasantly with them, both in lectures and in conversation The students themselves expressed a desire for more information on racial matters They were therefore given a "course" in which films, pictures, radio programs, maps, and charts were the main ingredients In the other experiment, forty-six college students were exposed to intensive social and intellectual contacts with Negro leaders for four days Prejudice was definitely lowered in both experiments. In the second, the greatest shift was in such matters as willingness to share dining-room accommodations with Negroes, or in having Negro guests, escorts, or friends Greater respect for the abilities of Negroes was also evident The attitudes that showed least change concerned intermarriage. If such alteration of attitude can be gained by a four-day conference, there would seem to be real hope of greater amity between groups by widespread and continued use of this approach.

One other approach has also yielded quite good results Several teachers in the tenth grades of four schools taught one of their regular classes by the usual methods and the other by use of assignments that dealt with such problems as slum clearance or attitudes toward Negroes. The

²⁹ P. H. Mussen, "Some Personal and Social Factors Related to Changes in Children's Attitudes toward Negroes," *Journal of Abnormal and Social Psychology*, 45 423-441, 1950

³⁰ B. K. MacKenzie, "The Importance of Contact in Determining Attitudes toward Negroes," *Journal of Abnormal and Social Psychology*, 43 417-441, 1948

³¹ S. Holbrook, "A Study of Some Relationships between Negro and White Students in the New York Public Schools," *High Points*, 26 5-17, 1944, and F. T. Smith, "An Experiment in Modifying Attitudes toward the Negro," *Teachers College Contributions to Education*, no. 887, 1943, 135 pp.

students also acted out plays concerning the same topics. Nothing was said by the teacher about application of the ideas presented. Indeed, there was no direct instruction at all in these matters. Before the experiment began

Table 48 RESULTS OF INDIRECT TEACHING

*Per Cent Who at End of Semester
Showed More Tolerant Attitude Toward*

	<i>Negroes</i>		<i>Slum Clearance</i>		<i>Total</i>	
	<i>Exper.</i>	<i>Control</i>	<i>Exper.</i>	<i>Control</i>	<i>Exper.</i>	<i>Control</i>
Private school	69	46	36	54	64	61
Rural high school	41	41	68	48	60	53
Campus school of teachers college	57	45	39	32	59	41
Urban, low socioeconomic school	57	13	61	42	74	33
Average	55	36	51	44	64	47

Based on M. L. Hayes and M. E. Conklin, "Intergroup Attitudes and Experimental Change," *Journal of Experimental Education*, 22:19-36, 1953.

and again at the end, both experimental and control classes took tests that measured their attitudes. The results appear in Table 48. It would seem from the figures there that this indirect approach might be found useful in conditioning attitudes.

Identifications

The world is full of heroes and hero worshippers of all ages and conditions. Identification of oneself with a hero and conscious imitation of him are presumably as old as humanity. The process is extremely useful at all ages and is especially so in adolescence, when ideals are in process of formation.³²

Identification begins early, with the small child's intense love of his parents and his efforts to be like them. Most children develop a similar attitude toward at least one elementary school teacher or a Sunday school teacher, a Boy Scout or Camp Fire Girls leader, a movie hero, a camp counselor, or other adult who is the embodiment of perfection at the moment. That the hero has a great effect upon the young worshipper cannot be doubted. One has only to count the Zorro shirts—or whatever other kind may be in vogue by the time this book appears—worn by the neighborhood small fry to find evidence of hero worship. Some youngsters prefer a fic-

³² O. E. Klapp, "Hero Worship in America," *American Sociological Review*, 14:53-62, 1949, and K. Lawrence and M. H. Frank, "One Way to Personality," *Childhood Education*, 25:389-393, 1948.

tional character or one taken from popular cartoons. During preadolescence and adolescence, most girls find the personification of their ideals in movie, television, or stage actresses, or occasionally in men singers, and sometimes in their teachers. Adolescent boys tend to either purely athletic heroes or men who play glamorous but highly adventurous roles in the movies, they reject the "great lovers," who appeal mainly to girls in their late adolescence and to maladjusted women. As children grow older and learn about historical or present-day public figures, some of them substitute characters they read about for people they know.

Two investigations of ideals at different ages will be summarized briefly. The first concerns the identification of school pupils at three age levels—seven to eight, eleven to twelve, and fifteen to sixteen. The main results appear in Table 49. There is a decrease in the proportion of school pupils

Table 49 IDENTIFICATIONS AT DIFFERENT AGES
(The figures are percentages)

	Age Groups		
	7-8	11-12	15-16
With members of the family	52	20	13
With adults in family	38	17	10
With well-known persons	12	28	44
With movie or radio stars	8	30	31
With age-mates	7	5	21

Based on J. B. Winker, "Age Trends and Sex Differences in the Wishes, Identifications, Activities, and Fears of Children," *Child Development*, 20:191-200, 1949.

who identify themselves with any member of their own family but especially in the identification with adult members. Hero worship of well-known characters increases. At later stages of adolescence the percentages would probably be even higher. Identification with age-mates begins to be important in the early adolescent years and continues to increase throughout the period.

A second study shows the change in identification from late childhood to middle adolescence. The identification of the self with glamorous adults or with young, attractive, successful adults of actual acquaintance decreased for both sexes. The boys showed increased identification with their fathers—perhaps because a proportion of them were already planning to enter their father's business. The characteristic change is, however, in the identification with an imaginary, idealized person, who usually has the characteristics already admired in earlier identifications, but has them all at once! In the early years of adolescence there is a strong tendency to stress physical beauty, fame, wealth, or personality as the basis of admiration. In the latter years the emphasis shifts to those traits that are moral, intellectual, or altruistic.

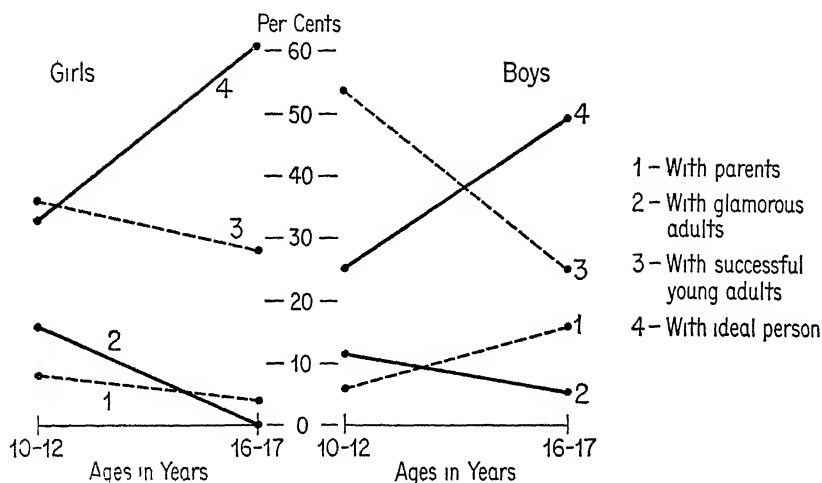


Fig 127 Identification at Two Age Levels

Based on R. J. Havighurst, M. Robinson, and M. Dorr, "The Development of the Ideal Self in Childhood and Adolescence," *Journal of Educational Research*, 40 241-257, 1946

Summary

Research into attitudes and beliefs shows that young people reflect faithfully the attitudes of their elders, but also that they tend to modify these points of view as they grow older and are influenced by various individuals and agencies outside the home. Their attitudes toward the members of various nationalities, races, and ethnic groups are compounded of those of their parents and teachers, plus those which grow out of current events. Certain traits of personality and certain background conditions tend to produce intolerance and prejudice, while contrasting influences tend to produce tolerance. Information, as usually given at least, does not seem to be an important factor in the development of attitude. Most prejudices are of emotional origin and may be merely projections by means of which an individual rids himself of emotional tension.

Children tend to identify themselves with some older person from their immediate neighborhood—a parent, family friend, teacher, Scout guide, and so on. In preadolescence and early adolescence many boys and girls select either a more or less public character or a successful young adult or a historical character as an ideal. This phase is relatively short and seems to be based upon glamour or financial success. The commonest ideal in the later adolescent years is an imaginary person who has the positive characteristics of former identifications and acts as an "ideal" self.

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21

Religious Beliefs and Moral Behavior

The material of the present chapter is concerned with three main topics. the typical religious beliefs and attitudes of adolescents, the growth of ideas about morals and moral behavior, and the development of a philosophy of life. Whenever possible, the writers have selected articles that show developments with age, but such articles are not to be found on every topic. All the material taken together gives a fair picture of the religious attitudes and experiences of adolescents.

Religious Attitudes and Interests

Ideas on religious questions, interest in religion, degrees of conviction, and attitudes toward religious matters all vary with age and develop by a fairly orderly series of changes that continue into adult life.

Small children often show a free, unconventional, and vigorous imagination in their thinking about religion. For instance, one little boy drew three lines that swept across a page as if he were trying to represent a wind-storm and said that he had drawn a picture of God. Another drew the back of a man's head and said that one could not draw God's face because it shone so brightly one never saw it. Many children show a tendency to deify their parents, as their first concept of God. One writer has postulated three stages of religious development among children: ¹ the fairy-tale stage, during which children have all manner of fanciful beliefs, the realistic stage, during which they reject earlier imaginings and give explanations in terms of natural phenomena, and the individualistic stage, during which they begin to select from religion the elements that satisfy their own needs and drives. In general, children tend to accept such formal religious concepts as their elders choose to offer them, without doubt as to their correctness but not without many questions as to their nature. As children approach adolescence and begin to question authority of all kinds, they may revolt from

¹ E. Harms, "The Development of Religious Experience in Children," *American Journal of Sociology*, 50: 112-122, 1944.

church as well as from both home and school domination. A considerable number of adolescents investigate religion anew as a possible source of both emotional and intellectual stimulation and satisfaction. At each age beyond

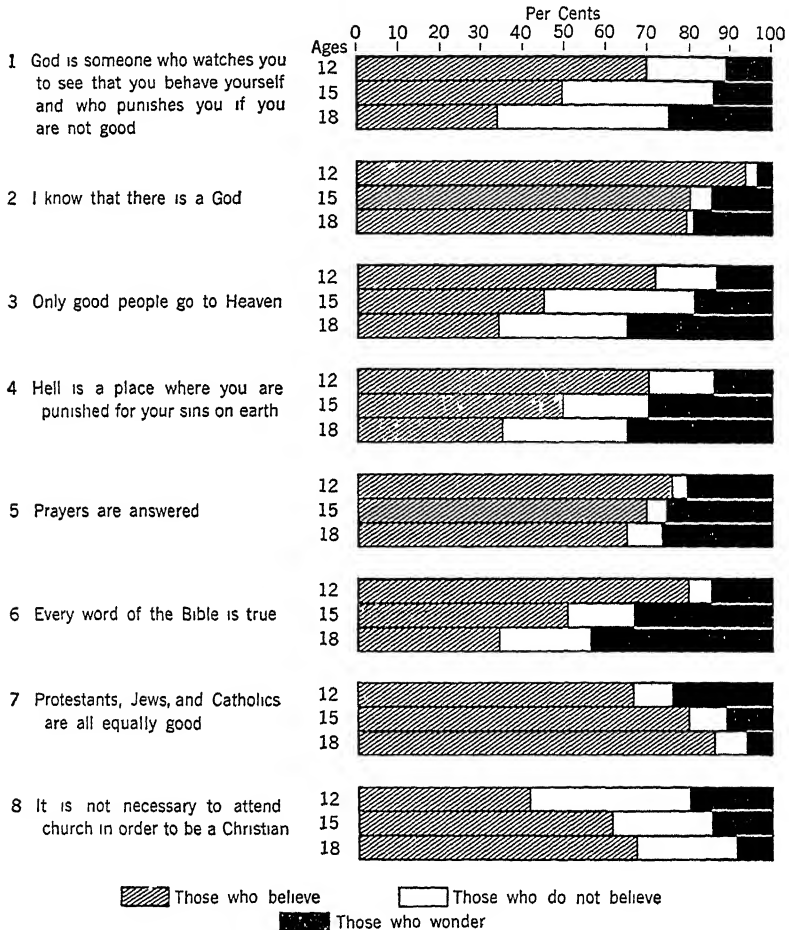


Fig 128 *Changes in Religious Beliefs with Age*

Based on R. G. Kuhlén and M. Arnold, "Age Differences in Religious Beliefs and Problems during Adolescence," *Pedagogical Seminary and Journal of Genetic Psychology*, 65: 291-300, 1944.

fifteen, more and more boys and girls become critical of religion. After becoming adults, many of them settle down to a rather indifferent, though tolerant, attitude. Religion would seem to have some value to children, although probably none of the usual adult values, since children do not have the mental ability to understand the basic ideas and ideals. Perhaps

they derive a measure of security from their belief in a God who watches over them and a relief from their feelings of guilt if they have trust in God's forgiveness. Adolescents want to find something in religion, but many of them fail to do so, and their reactions to failure often take the form of intolerance, cynicism, and withdrawal from contact with church activities. The hostility eventually dies out, however, and adults again find values, although not necessarily religious ones, in religion.

Two investigators have traced the growth of attitudes on eighteen religious problems between the ages of twelve and eighteen. Results for a few typical items appear in Figure 128. At the right are three shaded lines indicating the percentage of pupils at ages twelve, fifteen, and eighteen who believed, did not believe, or wondered about each proposition. In some cases the decrease in belief is due to an increase of pupils who rejected the proposition (No. 1), in some cases the decrease is due primarily to an increase in those who merely wondered about its correctness (No. 4).

Table 50 REASONS FOR PRAYER

	<i>Reasons</i>	<i>Per Cent</i>
1	To ask for personal benefits	22
2	To express thanks	19
3	To talk to God	15
4	To ask for guidance	11
5	To comply with habit	10
6	To seek comfort	8
7	To ask help for others	5
8	To ask for forgiveness	5

Based on E. Pixley and E. Beekman, "The Faith of Youth as Shown in the Public Schools of Los Angeles," *Religious Education*, 44:338, 1949.

In spite of more or less talk to the contrary, presumably by a highly vocal minority, there is still a good deal of interest in religion on the part of adolescents. One of the most impressive reports comes from an analysis of 3,676 essays written anonymously by high school seniors in Los Angeles. Of this number, 36 per cent attended church regularly, 52 per cent irregularly, and 12 per cent never or almost never. Their urge for going came from a desire to honor or learn more about God (41 per cent), from pressure by their parents (28 per cent), from pressure by their own consciences (23 per cent), or from a desire for fellowship (8 per cent). Of the 436 who never went to church, only 18 (4 per cent) stayed away from lack of belief, almost 90 per cent of the nonattenders said they believed in religion, but were prevented from attendance by work or lack of transportation. A total of 3,317 seniors also wrote on prayer, but only 520 of the papers were sufficiently articulate to be worth analyzing. The reasons given for praying are listed in Table 50. The impression one gets from this study is that these adoles-

cents, at least, were far from godless. A few brief quotations from their papers on prayer are reproduced below.

Of course many people need prayer as a spiritual cleansing. Even as you sometimes feel you would like to talk to someone heart to heart, I can understand how others would get things off their chest and stabilize their perhaps tottering beliefs through prayer.

I, like many teen-agers, am very close to God in my feelings, yet often do not show this openly. Many young people have more faith than adults believe. I can talk to God when I can talk to nobody else. He is a friend who will always be with me in the darkness of my room. I often say prayers that are memorized but I get more satisfaction from making up my own—I feel that I am talking to God and that he is listening.

I feel rather guilty about my lack of prayer, but I cannot exactly believe, somehow, that rattling off a few memorized lines every night before jumping into bed does anyone any good. In serious times or times of stress, or at a time when success is wanted, I think most people of my age call upon prayer for help, and I think we all feel rather uneasy about not praying more, but maybe we have not lived long enough nor seen enough of the crises of life to feel the need of calling upon Him for help.

Like all humans, I only call upon God's help when everything else seems to fail. It is not right to do this, I think there should be time for prayer in every day. But to be truthful, I only give prayer when I need help, when a situation arises which is too large for me to untangle.

I, for one, do not pray often, and I know of few people who do, except when they want something. Whether it was the same situation in past generations, I do not know, but I imagine it was different. Why the change is in our generation I do not know. But I do know that one who is brave enough to admit that he prays is laughed at by most high school students of today. This is not because of the training we have had, but the lack of it.

I don't believe in prayers. When I was ten years old I wanted a bicycle very much, so prayed in order to get it, I would pray every morning, and at night before I would go to bed, sometimes when I had time during the day I prayed too. I didn't get the bike, so I could never again see any sense in praying. Since that time on I never prayed again.²

This series of reactions represents a wide range of opinions and feelings, such as might probably be obtained from any other large group.

In the year 1930 an able investigator collected reactions to twenty-five religious propositions on the part of the 266 freshmen in the small college where he taught. In the fall of 1949, he repeated the same series with the

² E. Pixley and E. Beekman, "The Faith of Youth as Shown in the Public Schools of Los Angeles," *Religious Education*, 44:338-340, 1949. Used by permission of *Religious Education*.

852 freshmen who had just entered.³ In both instances, the students were asked to mark each statement according to the following plan:

- A—If you believe implicitly
- B—If you have an inclination to believe but cannot help doubting
- C—If you do not know whether you believe or not
- D—If you are inclined to disbelieve, but are not sure
- E—If you absolutely do not believe

In general, the percentage in each classification on all twenty-five items put together changed relatively little over the nineteen-year period. Nine per cent fewer students registered implicit belief, but 5 per cent more indicated an inclination to believe, 4 per cent more were in doubt, 2 per cent more were inclined to disbelieve, and 1 per cent fewer were sure of their disbelief. The shift, though small, was rather consistently downward.

Eight sample items appear in Figure 129, together with the results from the two groups of freshmen. In the interests of simplicity, the "C" answers have been omitted. Items 3, 5, and 8 registered little change. Items 1, 2, 4, and 7 are those that showed the greatest shift in belief, and items 7 and 8 showed an increase in implicit belief. In the case of items 1 and 5 there was an increase in absolute disbelief.

There have been a number of good studies concerning the degree of religious interest typical among high school or college students. In one case,⁴ 71 per cent of high school students attended church regularly, 45 per cent prayed regularly and another 54 per cent prayed sometimes, 17 per cent read the Bible with fair regularity, and almost all were more or less concerned with spiritual matters. Among a group of college students, 80 per cent said they had faith in Christ,⁵ but only a third read the Bible or prayed regularly. Those who scored highest in religious beliefs were more worried, more introverted, had poorer adjustment to their families, and scored lower on intelligence tests than the nonbelievers. Among Catholic students, the figures for church attendance were somewhat higher. Of the 1,668 questioned, over 90 per cent went to Easter Confession and a similar number attended Mass every Sunday.⁶ In another study, a majority of high school students held favorable attitudes toward religion, and more than half went to church every Sunday and prayed every day.⁷ A total of 8,000 high school

³ G. J. Dudycha, "The Religious Beliefs of College Freshmen in 1930 and 1949," *Religious Education*, 45 165-169, 1950.

⁴ E. Beekman, "What High School Seniors Think of Religion," *Religious Education*, 42 333-337, 1947.

⁵ D. G. Brown and W. L. Lowe, "Religious Belief and Personality Characteristics of College Students," *Journal of Social Psychology*, 33 103-129, 1951.

⁶ J. H. Fichter, "The Profile of Catholic Religious Life," *American Journal of Sociology*, 58 145-150, 1952.

⁷ M. S. Myers, "The Role of Certain Religious Values for High School Youth," *Studies in Higher Education*, Purdue University, 79 79-85, 1951.

students were asked to mark such items as "I believe that religious faith is better than logic for solving life's important problems," or, "I believe that God knows our every thought and movement"⁸ On the basis of the results, the investigator calculated an "orthodoxy" score, with the distribution

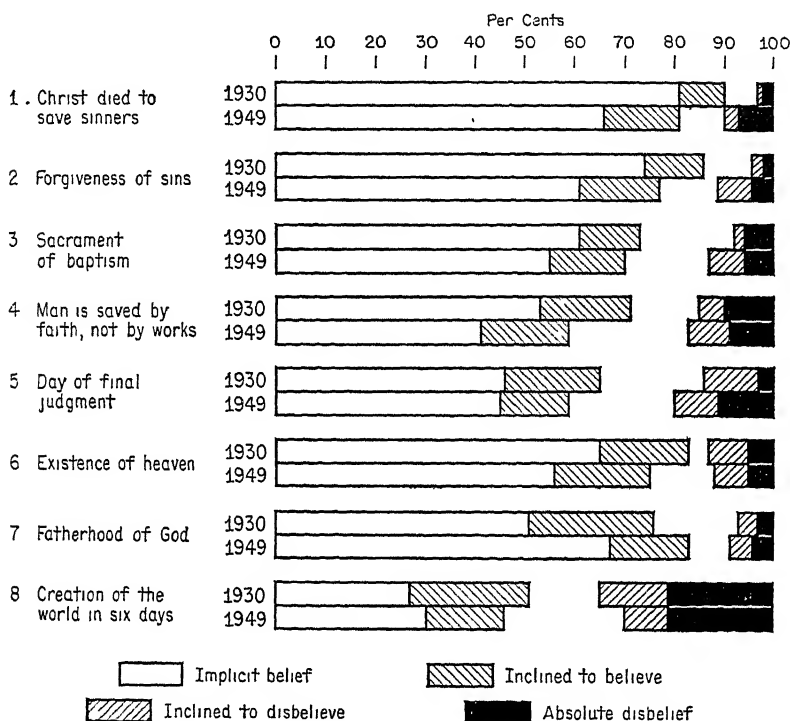


Fig. 129 *Changes in Beliefs among College Students from 1930 to 1949*

Based upon figures in G. J. Dudycha, "The Religious Beliefs of College Freshmen in 1930 and 1949," *Religious Education*, 45: 166, 1950

shown in Figure 130. These students varied from those who were completely unorthodox to those who were completely orthodox in their beliefs. Moreover, the four largest groups are all at the orthodox end of the scale. These studies suggest that the youth of today retain rather faithfully the religious attitudes of their elders.

In 1952 a Swedish investigator asked school pupils of various ages to complete a story or episode that began with the words "One time I thought of God . . ." The pupils were to finish the story in any way they saw fit. Some of the writers were children, and some were adolescents. The

⁸ M. S. Myers, "Latent Role of Religious Orientation," *Studies in Higher Education*, Purdue University, 78: 61-94, 1951.

greatest single reason for thinking about God was in an emergency of some kind, 44 per cent of the boys' statements and 26 per cent of the girls' concerned some difficulty in which the thought of God came to them. Some times a moral question was involved, and sometimes not. Others were

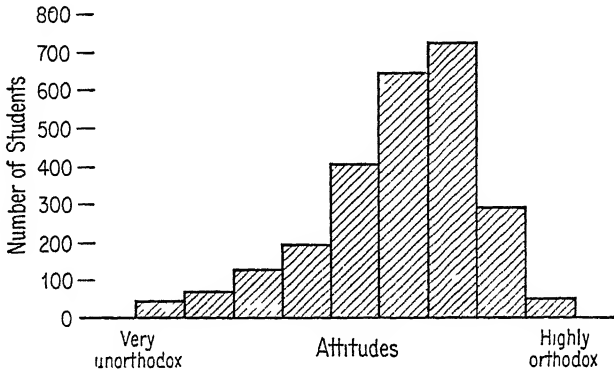


Fig 130 *Orthodoxy Scores*

Based on M. S. Myers, "Latent Role of Religious Orientation," *Studies in Higher Education*, Purdue University, 78: 61-94, 1951.

stimulated to think of God during church services or when they were in a particularly beautiful environment. Two typical reports are presented here.

Child, age 10. One time I was alone in a room. There were 20 kroner [coins] lying on the table. I was greatly tempted to take them. In fact, I had already stuffed 10 kroner into my pocket when something inside me said, "Put them back! Put them back!" I think that it was God who talked with me. I laid the 10 kroner back on the table. At the time I knew surely that God had spoken to me.

Adolescent. When we read about astronomy in school I immediately became greatly fascinated by how ingeniously the universe was constructed. Then the thought came to me: "Who has created all this?" God, naturally. God cannot help wanting to look after what he has created. Yes, He is, as everyone says, all-powerful. Never before had I really thought what it meant that God was almighty. But it became clear to me in that hour.⁹

The outstanding emotional values of religion to adolescents, and probably to adults also, are three in number. There is first the catharsis of guilt feelings through prayer, the confessional, or talks with ministers. The resulting feeling of being cleansed of sin, of being given another chance, and of reduced tension is of great value in adjustment. A second value is the increase of security, sometimes relatively superficial and sometimes pro-

⁹ G. Klingberg, *Studier Barnens Religiosa Liv*, Diakonistylses Bokforlag, 1953, pp 103 and 116.

found, that may result from religious belief. A trust in God prevents the panic of despair, a belief in personal immortality with its promise of an everlasting perpetuation of the ego prevents the fear of death, the membership in a group gives a sense of belonging, and the chance to work with and help others leads to helpful identifications and attitudes. These values are not all of a religious nature, but they are of assistance in the search for happiness and adjustment. Finally, religion can become the basis for a sound philosophy of life, even though it does not always do so.

Moral Attitudes and Behavior

The studies to be reported are of three types. First comes a brief summary of an old but extremely good study into the behavior of school children and adolescents. The pupils were given chances to cheat without their knowing it, and a record was kept as to whether or not they availed themselves of the opportunity. Honesty was studied in both school and play activities. The second type of investigation is concerned with ideas of honesty and moral behavior. A third section deals with the development of ideas as to what is right and what is wrong.

The extent of dishonest behavior, as measured in the first study mentioned above, correlated directly or inversely with a number of factors, some of which are shown in Figure 131. The first set of bars shows the percentage of cheating on school examinations by children at different levels of intelligence, the brighter the children were, the less they cheated. The second part of the figure gives the percentage of dishonesty shown by children from homes of different cultural and economic levels, the better the home, the less the dishonesty. The third set of bars illustrates the relation between suggestibility and dishonest behavior. The more suggestible children were, the more they cheated. The last section of the figure shows dishonesty to be related positively to retardation in school and negatively to acceleration. If a child is bright, accelerated, resistant to suggestion, and a member of a good family, there is little likelihood that he will be dishonest, if he is dull, retarded, suggestible, and a member of an uncultured family he is almost certain to be.

Three studies present the opinions of children and adolescents, in one case about stealing, in another about various mild forms of deception, and in a third about lying under different circumstances. Among 184 pupils who answered a series of questions about various forms of stealing, only 12 per cent maintained an absolute standard of honesty in their answers and insisted that stealing was wrong, no matter what it was called, or what was stolen, or who had previously owned the stolen object, or what circumstances prevailed at the time.¹⁰ Just two thirds of the pupils showed a slid-

¹⁰ C. B. Stendler, "A Study of Some Socio-Moral Judgments of Junior High School Children," *Child Development*, 20 15-28, 1949.

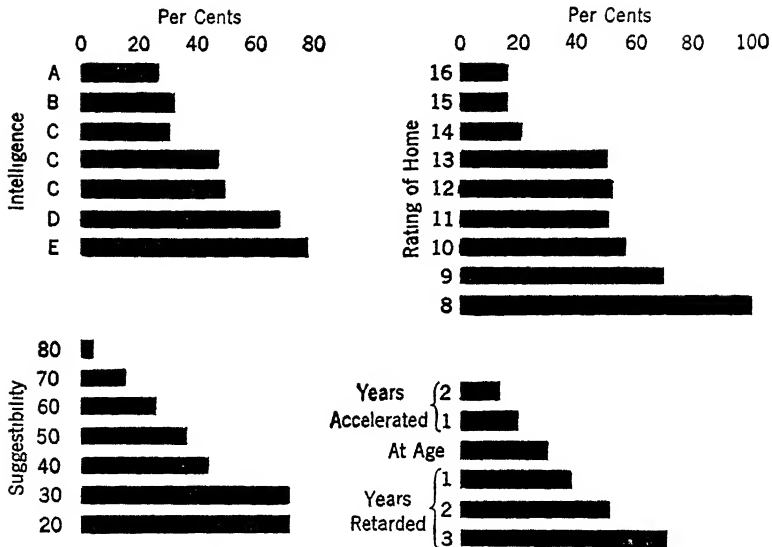


Fig 131 *Factors Correlated with Dishonesty*
(Bars Indicate Per Cent of Cheating)

From H. Hartshorne and M. May, *Studies in Character*, The Macmillan Company, 1928, I, 183, 261, 215, and 279. Used by permission of the publishers.

ing scale of morality by condoning stealing under at least one and often several such circumstances as these.

- 1 Stealing from a corporation, not an individual
- 2 Stealing from either corporation or individual who would never notice the loss
- 3 Stealing whatever careless people had left lying around
- 4 Stealing from people who are strangers or members of a despised racial or social group
- 5 Stealing things of low intrinsic value
- 6 Stealing from members of the family
- 7 Stealing that is never detected.
- 8 Stealing from a person whom you dislike or who has been disagreeable to you

The remaining 22 per cent marked the statement that they would refrain from stealing only if they were fairly sure of being punished.

In the second study, 328 normal boys of nine, twelve, and fifteen years of age were presented with a series of described situations, such as the following.

A boy got on to a bus. The crowd pushed him into the bus and got between him and the conductor, so that he could not drop his fare into the box. The boy

thought that it was not his fault that he did not pay, so he got off the bus without doing so¹¹

The pupils answered two questions about each story "If this had happened to you, would you have done what he did?" and "Would it be right for you to do what he did?" Between the ages of nine and fifteen the anticipated behavior became steadily less moral. That is, more fifteen-year-olds than nine-year-olds admitted they would indulge in minor dishonesties. But their awareness that such behavior was wrong increased steadily with age. Only 37 per cent at age 9 condemned the dishonesties, but by age 12, 84 per cent did so, and by age 15, 92 per cent. This study suggests strongly that knowledge of right and wrong is by no means sufficient to produce moral behavior.

This last point is further emphasized by another study that shows no relation between moral knowledge and moral behavior.¹² Indeed, the two traits seem to have different rates of growth and to be produced by different conditions. Moral knowledge alone is not adequate for the production of moral behavior, although it undoubtedly is one of the contributing factors.

A third study, though admittedly old, gives interesting information concerning the attitudes of children and adolescents about lying. Pupils in grades 5 through 12 were asked whether or not they considered "white" lies—that is, lies for social reasons—justifiable. Also if lies were to be condemned on practical or moral grounds. The results appear in Figure 132. As age increased, an ever-greater proportion of the pupils thought social lies were justified. The difference between boys and girls is slight, but favors the girls. It would seem from common observation that this form of lying were somewhat more common among women than among men. A decreasing proportion of the pupils marked the statement that no lies should ever be told, for practical reasons. There was not, however, a corresponding increase in those thinking that lies were wrong for moral reasons.

What adolescent intellectual development can add to the notions of honesty held by children is an ideal of honesty. A child typically lacks ideals, because he does not have the intellectual capacity to understand them. His behavior is therefore based mainly upon the specific habits in which he has been trained. He regards as "right" those actions he has been allowed to do, or rewarded for doing, he regards as "wrong" both those actions of his own that have met with punishment and whatever other behavior he has heard condemned verbally by elders in whom he has confidence. Because a child lacks abstract ideas, such as an ideal of honesty, he is likely to be honest at some times and deceitful at others, according to whether or not he has received training in each particular situation. A

¹¹ E. K. Beller, "Two Attitude Components in Younger Boys," *Journal of Social Psychology*, 29 137-151, 1949.

¹² D. McRae, "A Test of Piaget's Theories of Moral Development," *Journal of Abnormal and Social Psychology*, 49 14-18, 1951.

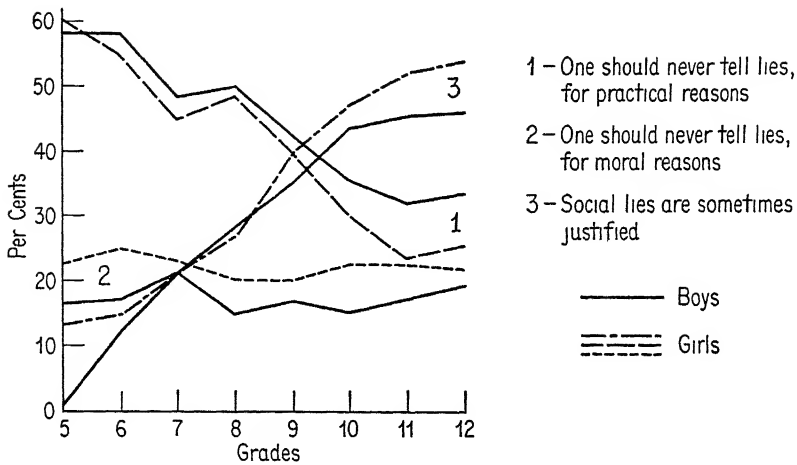


Fig 132 Attitudes about Lies

Based on B. E. Tudor-Hart, "Are There Cases in Which Lies Are Necessary?" *Journal of Genetic Psychology*, 33: 586-641, 1926. This study is old, but valuable, since nothing newer has replaced it.

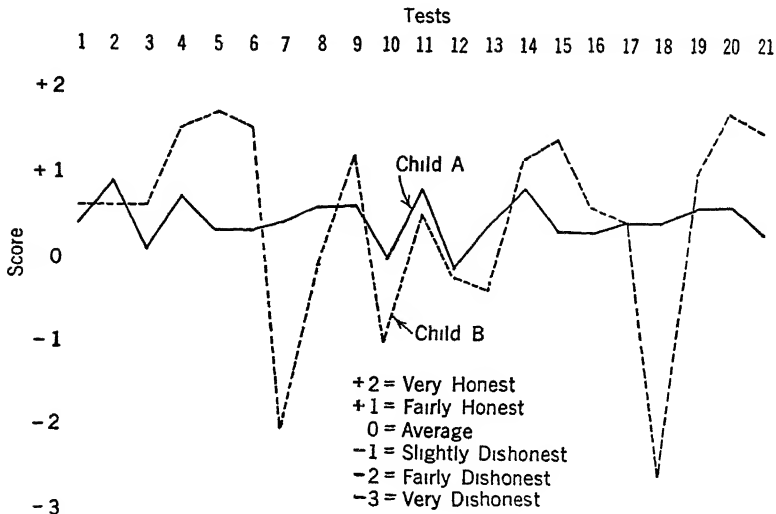


Fig 133 Honesty of Two Children as Measured by Twenty-one Tests

From H. Hartshorne, M. May, and F. K. Shuttlesworth, *Studies in Character*, The Macmillan Company, 1930, III, 291. Used by permission of the publishers.

good example of this point is given in Figure 133. Two children who took twenty-one different tests of honesty had widely different degrees of consistency, although their average was about the same. Child A scored fairly high, and his performance was quite even. Child B, on the other hand,

varied from a scrupulous honesty to arant deceit. This second curve reflects the piecemeal concept of honesty that is so common among children.

The adolescent can identify the common element in his many previous experiences with honesty and can therefore obtain a generalized meaning of the term. He can also apply his concept to new situations. When this stage is reached, the adolescent has achieved an ideal, which becomes his "guide to conduct" in situations that are unfamiliar. Every normal adolescent has ideals, although they are not necessarily acceptable. The boy who sees in many diverse situations the ability of the strong to coerce the weak may develop the ideal that "might makes right." He then uses it to guide his own conduct and as a basis for judging new situations. His generalization is just as truly an "ideal" as a conviction that the strong should protect the weak.

Since concepts grow out of experiences, the child with socially acceptable habits usually grows up into the adolescent with socially acceptable ideals. Hence the vital importance of training children in desirable habits. The small boy who "swipes" other pupils' erasers, buys candy with money given him to put on the collection plate, and cheats in games is laying the basis from which he will develop the ideal that dishonest conduct is wrong only when it is detected. No other general principle could reasonably be deduced from his early experiences. To be sure, the period of adolescence may bring new experiences, and these will, in turn, lead to modifications. However, the essential connection between childhood experiences and adolescent ideals should not be forgotten.

A study originally made in 1923 and repeated in 1953 shows the changes in ideas of right and wrong with age and also with the passage of two decades.¹³ In both studies, children marked more things as wrong than adolescents did, and adolescents marked more things as wrong than young adults did. Older adults, in their fifties and sixties, tended to mark about the same number as did adolescents of their own decade. Very few specific items were marked more by older than younger individuals. Figure 134 shows changes with age on four of the items. The two "borderline" wrongs of smoking and card playing were marked less with increasing age, while the two "sins" of a characterological type were marked more. These curves are for boys only. The first two curves for the girls are somewhat lower, they condemn conceit a good deal more than the boys do but bribery a good deal less. Between 1923 and 1953, there was a general decrease at all ages of the number of things marked as wrong, showing a shift in general standards. On the whole, the children were affected least.

¹³ S. L. Pressey and A. W. Jones, "1923-1953 and 20-60 Age Changes in Moral Codes, Anxieties, and Interests, as Shown by the X-O Tests," *Journal of Psychology*, 39 485-502, 1955.

A few examples of how a guiding principle may grow out of specific experiences may be of interest. In some cases, the ideals were translated into vocational ambitions.

I happened to be living in a small mining town at about the age of eleven. Here I saw the horrors of the sickened miners. The pain they had to suffer because of the lack of a doctor. I was only about eleven or twelve years of age but I could understand the life of these mothers and fathers and children who lived at this great disadvantage and I determined at that time to do my best to help these conditions with my whole heart. I have never lost this ambition and I am sure I never shall.

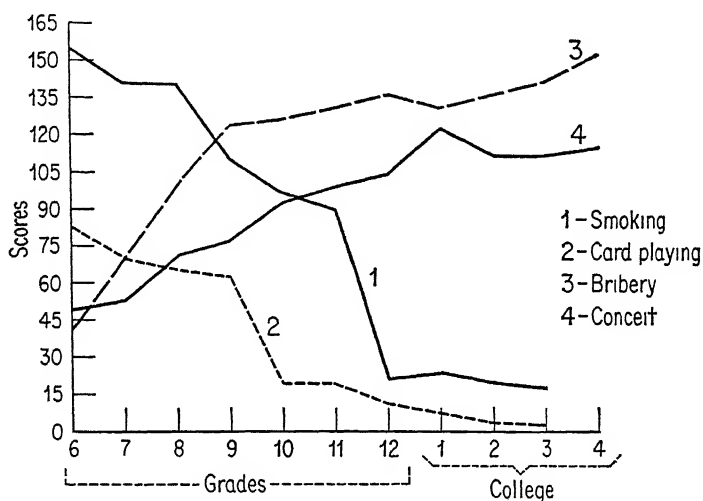


Fig 134 *Things Regarded as Wrong*

Based on detailed results from the Ph D Thesis of O R Chambers, Ohio State University.

One can see in everyday life the results of diseases. A wage earner may be afflicted and his family be forced to fall back on national support. When one sees a person in a hopeless condition, it awakes a desire to better this condition regardless of compensation or reward. There is no feeling so exhilarating as that which comes with the realization that you have helped some person to the extent of your ability, no matter how small this help may be.

The institution I would like to see exist some time would be a hospital which was supported by every individual in a city. Each family head would pay a small amount each year, regardless of whether anyone was sick in his family or not.¹⁴

¹⁴ H. H. Moore, "Autobiographical Sketches of High School Students Revealing Their Social Impulses," *Social Studies*, 26 436-439, 1935. These three excerpts are used by permission of *Social Studies*. The two following sketches are also from this reference.

When I was 15 years of age my daddy was out of work, as he is now I liked to look through the catalogue of children's clothes and then tell mother how I would like to have a little girl and boy and buy them anything on that page that they wanted I often said that I would like to have a big car piled full of packages and then go in some poor sections and give food, clothing, and toys to poor families I joined the Girl Scouts when I was 10 and from them derived an ambition to become a leader Then I have done a lot of welfare work in our community and I am greatly interested in it My mother also had some influence over me in that matter because she said she always had the same desire

My mother and I had been to the theatre and decided to follow Tremont Street and see where it led It led to no pot of gold I had never seen such absolute filth and laziness before, not even in New York (although I have never been to the poorest sections of New York) I never want to see it again

It was not so much that these people are throwing their lives away but for the future generations that I care No children should live like that They should live in the country and bring up their children there I have seen the babies in the tenement houses with swollen heads because of lack of milk The hot, sweaty odor that comes from unsanitary conditions The mothers fainting, while trying to keep their young alive The husbands drunk, beating their wives and children The low, petty thief who never had a chance to better himself

It sounds rather farfetched for me, a girl, to attempt to better these conditions, but in newspaper work, if you ever acquire much of a following, you can do most anything and I plan to make people see just what a little money and kindness can do for these people

I became interested in this question when I learned what an appalling amount of unnecessary suffering comes from ignorance of the intricacies of sex, and how to treat them I believe that modern people still hold quite a bit of false modesty along these lines, and are more willing to see insanity and suffering increase than to frankly discuss these problems and endeavor to do something about them The book *Revolt of Modern Youth* by Judge Lindsey has given me some ideas, and though I don't agree with him in all of his beliefs, I do think that he has found the faults of the present time, and why they exist, if not a way to cure them

My mother told me everything when I was nine and the older I get the more I appreciate it. My friend had been hushed all her life when she asked questions and she was befogged by questions she dared not ask I tried to tell her but she could not understand me She was mixed up with a rotter, I told her so, but she didn't believe me, she had faith in him and he owned her When it was found out that she was pregnant she was sent to a home Today she is handicapped by her child Her mother will not speak to her and yet it is the mother's fault There are more cases of the same, ignorance certainly is not bliss I think frankness is a good characteristic A lot of trouble would not be caused if people were frank

Since I have been old enough to be told the facts of life (eleven years old) and as I grew older and could understand more deeply I have wished somehow that the world could be rid of sporting houses I have listened to lectures and read books about these things, not because I have a filthy mind, but because if I could do something I would want to have a thorough understanding of the matter.

Philosophy of Life

The modern adolescent wants to find a meaning to life, a synthesis of its discordant values. Certain elements in modern life make this effort of his especially difficult. First, he has from infancy been brought up on an objective, unemotional presentation of scientific facts. He usually knows just enough science to block his acceptance of traditional religion but not enough to make a synthesis of science with religious and moral beliefs. Second, he has moved about a good deal in a radius—large or small—around the center of his home and community, he is acquainted with many people, many customs, and many points of view, he often no longer has any roots in the place of his birth and early childhood. Consequently, he does not inherit a ready-made point of view from his surroundings. Third, he is met on all sides with the most divergent adult opinions. He sees no single, accepted mode of life, and he does not know what will satisfy his notions of right and wrong. Indeed, because of changes in adult opinions he may not know what is right and wrong—and probably the adults of his acquaintance do not, either. They have no clear-cut principles to hand down to him. Finally, he and his friends have extraordinary freedom from adult control. Many hours are his to do with as he pleases. It is not surprising that the world seems chaotic and meaningless. Some adolescents find consolation in organized religion, but more of them have to work out their own salvation.

Many adolescents have expressed themselves concerning the confusion they feel in trying to make sense out of life.

I am still wandering around in this maze of conflicting training, wondering what I will be like if I become molded to an acceptable pattern. My life has become without aim, without a goal to work forward to, a little without meaning. At present I have decided to step back into my shell, and out of the conflict of codes and desires and personalities that seem to make up society.¹⁵

My mother's tree spread with sturdy branches. Quaker, Puritan, Wesleyan, and Boone. If less conforming branches had grown there, they had been carefully pruned. This family, together with some half-dozen of their group, held rigid customs which they projected on each succeeding generation. They had three ambitions: to till the soil, to establish homes, to spend eternity in Heaven. My parents were the third generation of these upright pioneers.

Through me, a frail, nervous, little girl, they would project their way of life. I would reach perfection, I would be devoutly religious, kind, gentle, soft of voice and manner, a little lower than the angels. I would keep a household running smoothly, be a perfect seamstress, a renowned cook. I would sing and play and drink deeply of the joy of music. I would have a deep and perfect understanding. "As a twig is bent, so is the tree," they reasoned.

¹⁵ These excerpts are from P. H. Landis, "Points of Strain in Adolescent Morality," *School and Society*, 51:613-614, 1940. Used by permission of the publisher.

Cut off from group contacts as a child, unhappy, living in the past in which my mother lived, I placed my faith in the future, and in my fantasy thinking built the foundation for a future different from the past. Left so often to my own thoughts, I began to question, to reason, to choose. The bonds which held me tightly to my primary group patterns still held firmly, but I felt that after graduation, when I went out "on my own," they would be severed and I would begin to live under new codes, to have new ideas, attitudes and habits which would make me a part of the society about me. Strange, illogical reasoning to believe that bonds so carefully tempered through the years would snap so easily!

I entered college mentally and physically exhausted. During the period of rest necessary to rebuild my body, I cut loose from the old inhibitions and began to give expression to long suppressed desires. Habits were difficult to break, but I found it could be done.

Here I must leave my analysis. With new stimuli, fewer taboos, more opportunity for borrowing new patterns, I will no doubt form new habits, but from the experience of recent years, it seems safe to conclude that I will never break entirely from the training of my childhood and of my youth.

From a study of my development, we may conclude that a personality may be shaped chiefly by the customs of a small group if that group is isolated by physical or taboo barriers, and that when this happens socialization in a larger group is difficult, that projection of the culture of an intimate "in-group" upon the child can be so effective as to practically eliminate the influence of "out-group" patterns and to make difficult the attainments of status in normal "out-group" life.

Further accounts of both religious and moral striving appear in the diaries and letters written by adolescents. These young people are more verbal than the average boy or girl, but one can assume that their feelings are not unusual.

Age 22 I busied myself yesterday evening for a rather long time with the question of religion, after there had been a discussion of religion as superstition in school. And I came to an entirely negative conclusion, namely, that according to my convictions there is no God and no soul. My principles are entirely atheistic and yet I regard myself as a religious man in that I believe it is better to be a respectable man and behave myself than to earn money, that is the contrast between Idealism and Materialism.¹⁶

Age 16 What is this incomparable greatness, the one who stands over all the happenings of our time, is it God or fate? It is ridiculous that aside from my friends and myself no one sees an ultimate purpose, or, better said, feels one. I could not imagine my life without the striving, without the belief. There must be some final purpose for which we strive, what would life be otherwise? I saw the goal, the great end purpose again beckoning me. It is not only truth, not only right, but love that brings us to things of the spirit—love of beauty, worth, and goodness. There must be a final goal that all recognize, toward which all strive.

. Otherwise why should we bring up children and educate them to be respectable?

¹⁶ These two sketches are from W. Abegg, *Aus Tagebuchern und Briefen junger Menschen*. Ernst Reinhardt, Basel, 1954, pp. 124, 127.

One's whole life and being would be meaningless I cannot say what the goal is . But one thing I do know that there is a goal It is to me a certainty because I feel it and live by it

Sometimes a synthesis is of an unconventional sort, such as is expressed in the last verse of the adolescent poem quoted below

Twenty years ago . .
 Her lover picked her mountain gooseberries
 Instead of shocking corn
 A clumsy feather in the winds of hate,
 (The Gods cause winds by shouting while discussing the Meaning of It All)
 Obese and solid, heavy with the weight of hastily born children
 Hair the mud-yellow of the baptismal pool after the baptisms . .
 (To cleanse the soul you have to soil the water)
 Eyes deadened with the knowledge of her life, brightened only a little by
 the certainty
 Of a dull heaven
 An ugly thing
 Something a lover of carnal loveliness
 Would find an ugly horror, standing beside
 The clear young girl, who may be no more pure
 And yet is beautiful (What else is needed?)

 In twenty years . Cleopatra wrecked a nation .
 Destroyed an army entwined a couple of Caesars .
 Died in a minute hair a little grey¹⁷

This lad certainly had a dismal view of life, while extreme, such a synthesis sometimes occurs.

Most adolescents want an understandable set of morals, a meaning to life, some guiding principles to help them see the discordant details as a sensible whole Adolescents have always needed such help, but never more than now For most high school pupils the lack of traditional morality among their elders is a source of confusion. Because they cannot get consistent guidance from older people, they turn to the various youth groups, many of which are intentionally quite independent of and antagonistic to whatever they regard as characteristically adult opinion These youth organizations tend to set up their own standards—some good, some bad, some radical, some conservative Although they help boys and girls to become independent, they do not always add materially to the clarity with which their members view the world However, one cannot blame the youth of today for trying in any way open to them to set up their own standards, since adults have few to pass on to them

Young people want chiefly two things from their philosophy—a feeling

¹⁷ P. Witty (ed.), *The Gifted Child*, D. C. Heath & Company, 1951, p. 253 Used by permission

of security that a rapidly changing society does not give them, and an emotional satisfaction that is not provided by the scientific world around them. Modern science can explain enough phenomena to divest the world of its awesome and highly exciting mystery, but it cannot yet—if ever—give an answer to the riddle of man's life and destiny. It feeds the mind but not the imagination or the emotions. In their efforts to interpret the world so that it has a meaning for them, adolescents want not only a sense of personal security but also a stimulus to imagination and an opportunity for emotional thrill. In the course of time modern youth may work out a new synthesis of values, a long-range concept that will almost certainly be independent of organized religion but probably will be an evaluation of human life in criteria that are social and ethical.

Summary

An interest in or a revolt against religion is an integral part of adolescence. In spite of a small minority of highly verbal cynics, religion continues to play a part in human existence and is of special value during the adolescent years in formulating ideals and standards of conduct. During the high school years the majority of students attend some church, at least at intervals, and not far from half of them attend regularly. The lowering of the attendance average during college comes perhaps more from the competition of other activities than from any actual loss of interest.

The results of almost any investigation of honesty leave one with a sense of disappointment. It is clear that by adolescence boys and girls have learned to adapt their standards to the social pressures of the moment. Cheating in school is frequent, especially among those for whom the curriculum is either too hard or irrelevant. As long as schools give marks, someone is going to be at the bottom, and adolescents will make every effort to prevent themselves from appearing in such an unfavorable light. Teachers should expect dishonesty from certain of their pupils, and should take what measures they can to prevent it, so that the honest ones may not be subjected to unfair competition.

Young people need and want a philosophy of life, from one source or another. They are not yet old enough to formulate a coherent philosophy, but they should make a beginning. The need for such an integration becomes more apparent with every decade, because modern life is so full of conflicting attitudes that neither parents nor children are able to find their way through the discordant elements. The recent development of mass media of communication has rather added to the confusion, since everyone's ideas are made available through these media to everyone else, but the integration is usually left to the consumer.

Most young people want to find a satisfactory philosophy of life. In

the course of their efforts they often subscribe to a number of more or less extreme points of view, most of which are transitory and experimental. Adolescence is the time par excellence of "isms." The desire to reform the world and to do some good during life is strong, partly because such ideas are new and partly because experience with the ways of the world has not yet had time to dent youthful idealism. The church and other religious forces do not contribute as much as they could to the formation of a philosophy of life.

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22

Community Influences

Even before he is born, every individual is influenced by the standards and customs of the community into which he is about to emerge. his mother's diet and his prenatal care, his family's pattern of organization, and even the chances of his survival when he is delivered are all part of the society of which he will become an influenced and influencing member. From his first howl—be it in a fetid hut or an irradiated air-conditioned hospital—he reflects, participates in, and acts upon the community. Only in relatively static societies does the child necessarily remain in the community where he was born, and even in such societies he usually becomes a member of a subcommunity at adolescence by a definite change in his peer group, in his work role, and often even in his residence. Adolescents in contemporary America range through community patterns of great variety from birth onward, and exist in a world in which community patterns are themselves in a process of unprecedented fluidity and regrouping.

The adolescent of the middle decades of the twentieth century is influenced by communities which are local, national, and international. And the nature of these "communities" is in a constant state of flux. It is no longer possible to speak and think of change in terms of generations—even ten years is too long a span over which to compare many environmental changes which will be affecting the daily lives of young people in the coming sixties and seventies. The rate of change is speeding up tremendously in many phases of living. This rate of change, and expansion of the areas in which contact and reaction take place, is going to have a profound effect on the whole viewpoint and program of the secondary schools, which are already feeling directly the pressures of a world of which artificial satellites are only the dramatic symbol.

The high school teacher who deals with boys and girls during the years in which they are most alert to the enormous diversity of values and ways of life has a great responsibility, therefore, in helping them to achieve both comprehensiveness and precision in looking at the world around them. Certainly an integration of those traditional values which contribute

to sound individual development, with the new values resulting from widening horizons, is essential. In meeting this challenge the educational programs of the school must respond with flexibility. Many educational authorities are making intensive efforts to bring this problem to the attention of the public.

The community is a strong pressure factor in the development of the educational pattern for its young people, and is itself influenced in its decisions by various groups that try to influence the school program so that it will conform to their special viewpoints. During periods of crisis or of accelerated change, these pressures are at a maximum. The present difficulties over desegregation of the public high schools throughout the country bring into clear focus the nature and extent of the forces bearing on educational patterns within a community, because they involve fundamental attitudes already fixed among the adult population. It is because of the profound interaction between the adolescent and the community that this chapter has been written.

Living Patterns in Transition

Census figures in 1958 show that nearly two thirds of the people in the country live in cities of 10,000 or more inhabitants. Urban life has had both positive and negative effects upon the family and indirectly upon both children and adolescents. One of the negative features has been the splitting up of the family because the many facilities offered by a city are commonly used by different age groups. Urban life also greatly increases the number of secondary groups to which one is likely to belong—one's work group, school, union, recreational club (golf, tennis, swimming, and so on), social or business groups or clubs of all sorts, committees, associations, or professional societies, plus mere membership in a number of larger organizations. The secondary groups afford a great many contacts of different kinds with different people, but the contacts are superficial. The demands made upon a single individual by his various secondary groups are numerous and often conflicting. There is no unity of either goals or attitudes. For many people the contacts are too numerous and too fatiguing. Urban life is composed largely of many diversified, superficial contacts with many secondary groups. As a result, the individual who belongs to twenty such groups but is still isolated and confused is a common phenomenon.

Since the beginning of the machine age, with its prolongation of education and its postponement of gainful employment, adolescents have had more and more leisure. Even the adolescent who has begun to work still has many unassigned hours. This universality of leisure is so new that there has not been time to educate communities into supplying youth with adequate means of recreation. Surveys have made clear the inadequacies of

the average community as a place in which young people with little or no money can find healthy diversion. Because of the demands made upon them by modern types of work and by modern life, all youngsters need opportunities for outdoor activities, for creative experiences, and for a full social life. The underprivileged boy or girl in either city or country is especially handicapped in his efforts to find recreation. Even adequate physical exercise, one of the relatively easy needs to meet, is not available for many urban children, and the rural adolescent, while considerably helped by radio and television, lacks many chances for active, cultural participation. City-bound youth have plenty of diversions, but not nearly enough chances to participate in activities of a constructive nature.

On the other hand, there are elements in modern life that are operating to draw the family back together again. Technological advances have freed the modern father from long, exhausting labor and the mother from endless drudgery at home. Opportunities for family recreation are increasing and there is enough money in most families for at least a small budget for recreational purposes. Community facilities for family recreation increase steadily, and the magnificent municipal, state, and national park systems encourage family outings. The family car takes the entire group to the nearest open space on Sundays and provides transportation for longer excursions over holidays and during the vacations. Within the family circle, television is offering something that all can enjoy. Perhaps the most vital and encouraging feature is the new leisure of the parents to become friends with their children, something that was hardly possible when both were in a chronic state of exhaustion from overwork.

Moreover, although a city is large, it rarely functions as a single social unit. Every city is made up of subcommunities, and in these small units children and adolescents develop much as they would in any small neighborhood, with family and home ties of considerable strength. It is so easy to see certain surface disintegrations in an urban area that there has been a tendency to lump an entire city population under the categories that are applicable to the least favorable aspects. However, some recent studies¹ have indicated that family cohesion and social interrelationships in urban situations have retained their important supportive functions in many relatively small neighborhood units of which any large city is composed. A study in San Francisco,² surveying over 700 adults in four quite different neighborhoods, found reason to question just how much actual impersonality does exist in urban life. It was found that the community did in fact offer sources of satisfaction in many types of social organization, and that

¹ M. Axelrod, "Urban Structure and Social Participation," *American Sociological Review*, 21 73-78, 1956

² W. Bell and M. D. Boat, "Urban Neighborhoods and Social Relations," *American Journal of Sociology*, 62 391-398, 1957

families were quite as cohesive in kinship as their status would have permitted in many nonurban situations. It is very easy to overlook the fact that the stereotypes many people hold for the "good old days" of neighborhood and family closeness were never true for the lower economic levels in cities. Nor was it true in, for instance, villages in the coal mining areas, which were quite as real a form of "village life" as any other, these grimy communities offered less chance of family contact, shared leisure, and cultural participation than most city dwellers now have.

Since World War II, the flow of urban, and some rural, families into the suburbs, and the development of the huge housing tracts where veterans (and some others) are able to own their own homes, have led to a profound repatterning of life for many American adolescents. People from every geographical area of the country, and from a huge range of economic and occupational levels, have come together as neighbors. Most of the parents have been roaming over the United States, practically all of the fathers have been overseas and have become aware to some extent of other nationalities and ways of life, their experiences have brought an increasing knowledge of many other lands and customs to the group experience available in the newly formed suburban units.

For example, one of the writers lived, with her young son, in such a community for three years. There was seldom a class in geography or social studies to which some neighborhood youngster could not bring a relevant personal or parental souvenir from a foreign country or another state. The occupations of the breadwinners on just one block ran, from house to house, as follows: auto mechanic, social worker, airline pilot, garageman, airplane technician, maintenance worker in schools, teacher, garage hand, and refrigeration engineer. They came from the Tennessee hills, the Midwest, Brooklyn, and there were wives from Mexico, Japan, Germany, and North Carolina! The children wore sandals from India and skirts from Mexico, carried bags made in Italy, and ate an international menu over their backyard barbecue pits, which collected from three to fifteen kids in a backyard on every balmy evening. The parents were active in PTA, boys' clubs, and community projects. It is true that few fathers had enough time for much supervision of adolescent activities. But more fathers and mothers spent long week ends working on their homes or taking the family to the beach than would have been possible a generation ago. Every effort was made to individualize the mass-produced houses, and a year after the tract opened they were far more the expression of the family within than were the city or rural dwellings of the middle classes before them.

While such developments certainly have some drawbacks in terms of initial uniformity, group pressures toward credit, and so on, the over-all influence on young people of an increasing stake in their community through the possession of stable housing and the international flavor of their daily casual way of life probably can be considered as offering more opportunity for real community ties to more adolescents than before, as the trend away from the rigidly rural or urban patterns continues. Naturally, concern with the inner problems of living is scarcely lessened

by these circumstances, but in communities that are increasingly aware of the need for meeting these problems, the techniques and conditions for dealing effectively with human problems are more available to more people of modest position than they have ever been before ³

In Figure 135 are two pictures of modern housing units. These are places where people of low incomes live, they are not the homes of the wealthy. One is an apartment house development, the other a housing project of low-cost family houses. One unit is located within a large city, the other is a short distance away from a metropolis, but they might be in the open country as far as air and space are concerned. They illustrate the new tendency of city planning to preserve the values of an open-air life but to combine them with the cultural and vocational advantages of a large community. By the time all the apartments or all the single houses are filled, a subcommunity of neighbors will begin to develop, and human relationships will assume the same proportions as are customary in small towns. Probably never before in such numbers have young people from middle-class and lower-middle-class families had an environment so well suited to their needs. Life in such settings is half rural and half urban. The apartment house in Figure 135 shows a large surrounding area that will not be built up, it extends for some distance on all sides and forms a small park. It has a recreational center with provisions for young and old, everything from sandboxes and wading pools for small children to game courts for adolescents and shuffleboard courts for the elderly. The housing development, shown in the second picture, is the type found in smaller communities. Although the houses are all built upon the same basic plan, the arrangement of the building elements varies, the color schemes are different, and each householder develops his immediate surroundings in any way that suits his fancy. By the time the houses have been lived in for a year, the fundamental sameness—that is somewhat depressing at first—has largely disappeared because of the variations which have been introduced by the owners. This second plan is doubtless the better one, but in thickly populated areas it takes too much room, and the value of land is so high that it cannot be used for single houses. Either arrangement is an enormous improvement upon former typical rural or urban housing for families with low incomes.

The culture of the United States is mobile in more ways than one. Most obvious is, perhaps, sheer physical mobility. In 1956, there were approximately 54,000,000 privately owned automobiles registered in the United States,⁴ and by the time this book is published the number will approach 60,000,000. Americans travel 180,000,000 miles by air each year, and no one

³ See also B. D. Paul (ed.), *Health, Culture, and Community*, Russell Sage Foundation, 1955, p. 295.

⁴ Statistics from *The World Almanac, 1958*, New York: *World-Telegram and Sun*, p. 682.

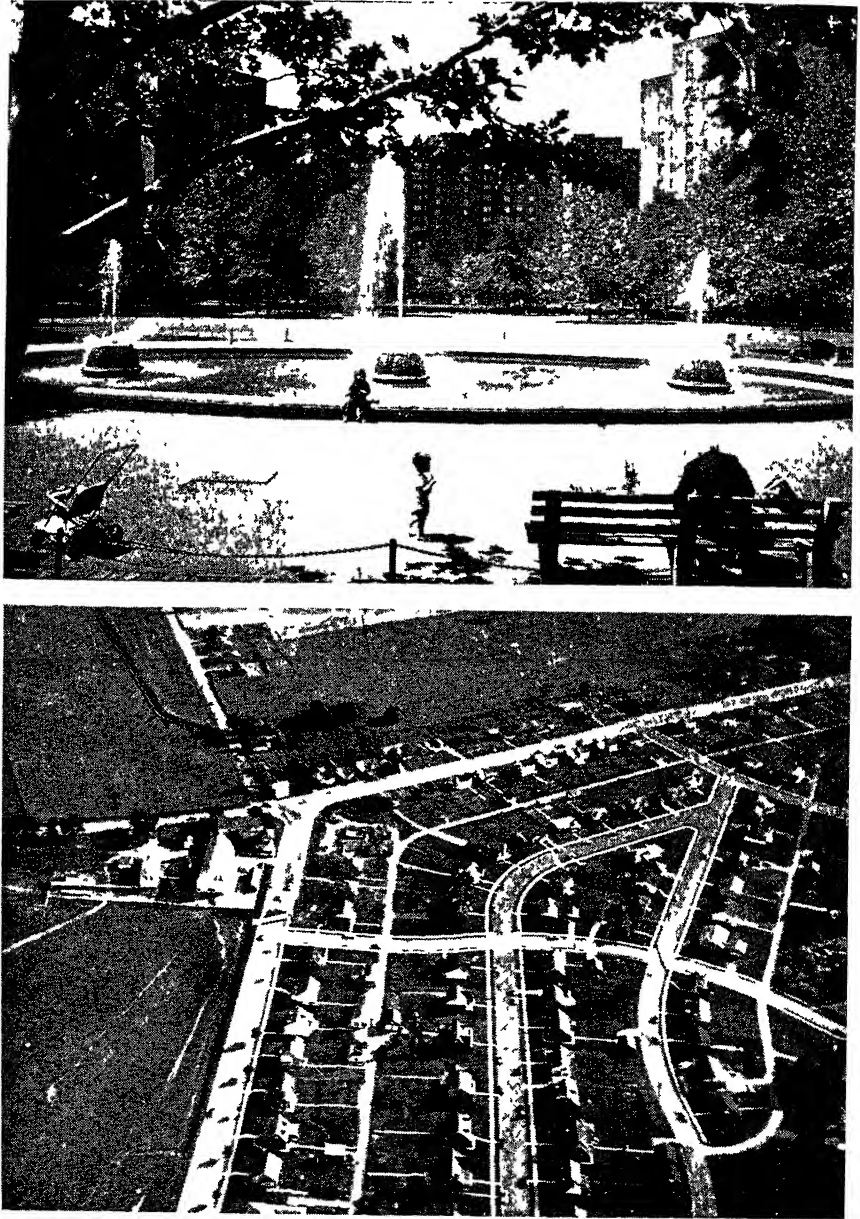


Fig 135. *Urban Housing*

Top Stuyvesant Town, New York City, Courtesy of Metropolitan Life Insurance Company.
Bottom Hummelstown, Pa, Photo by Strickler for Monkmeyer Press Photo Service

knows how many billions of miles by automobile. Because their means of transportation are both easily available and cheap, Americans are the world's most persistent travelers. In an ordinary year, over 2,000,000 people leave their own states and enter another, during the war years a third of the entire population changed states, at least temporarily. It is nothing unusual to meet ordinary working people of modest incomes who have lived in five or six different states and have driven through from thirty to forty of the others. This mobility of large segments of a population is no longer new, and is rapidly increasing.

In most states adolescents of sixteen may drive automobiles. As the adolescent social world is at present organized, the ability to drive a car and the permission to do so are integral factors in prestige and maturity. The boy or girl who cannot or may not drive is looked down upon. A sixteen-year-old is competent physically for this activity, although one may question his judgment, but it is with the indirect results of driving that the present section has to deal.

The car allows the adolescent to share in the great mobility of the period. Within an hour's time he can get so far away from home that no one is likely to know him. He thus escapes easily from the indirect supervision that adults in his own community automatically exercise by merely being there. Many adolescents have not yet developed sufficient internal control to dispense altogether with this indirect form of protection. Of course, adolescents have always been able to escape more or less, even if they had only their own feet as a means of transportation, the car merely allows them to escape to a greater distance in a briefer time. An automobile is not in and of itself a moral corrosive. If a boy or girl belongs to a peer group of similar standards, all members may be sufficiently self-censoring to give themselves protection, especially if one element in their thinking is their desire to maintain their reputation with their friends, their parents, and their community. The physical mobility of youth at the present time only intensifies an age-old problem.

A second and perhaps even more important form of American mobility is of a social type. At any particular moment the inhabitants of a given community may be grouped into fairly distinct social classes, but some families are moving up the scale, and some are moving down. There is nothing fixed or stable about the grouping of the moment. The next generation will arrange itself more or less differently. One of the writers had a demonstration of this kind of mobility not long ago. During a visit to her home town, she developed an earache and was sent by her friends to a highly recommended specialist, a Harvard Medical School graduate who had studied in Vienna for two years on a special scholarship. Dr. C. was a local leader not only in medicine but in many civic projects. His wife came from an old and distinguished local family. It was a little surprising

to the writer to recognize Dr C as the Shanty-Irish boy with whom she had not been allowed to play in her childhood! Such social mobility is an American commonplace

In a rapidly changing society, with a constant regrouping of communities, the adolescent's problems are intensified. Because adolescents are hypersensitive to social change and pressures, there is likely to be a considerable period of stress for them in a family that is rapidly moving upward or downward in the social scale or is going through a period of socio-economic change. Suppose, for instance, that a boy has grown up in a tenement area while his father worked daytimes and went to evening school to get a teacher's certificate, the family then moves to a residential area to be near the school that has hired the father. There is a difficult period of adjustment ahead for the adolescent until he has had time to assimilate the local standards, fads, speech, and dress. Such a situation may be an exciting challenge to a boy or girl who is secure and flexible, but an adolescent who is not secure within himself and within his family group is likely to feel for a while that he is a subculture of one. A loss of status, especially a sudden loss, is extremely damaging. Those who watched the effects of the 1929 financial crash will remember many instances of tragic social descent, with accompanying personal disintegration of those who could not find courage to meet the change. Ascent and descent go on all the time, but usually by slow and insidious stages

Community Resources for Individual Development

Almost any reasonably stable community has a number of social and cultural resources through which an adolescent may develop his abilities. The most outstanding among these are the schools, the churches, the libraries, the art museums, and the theaters. The contributions of the school and church are discussed elsewhere in this text and may therefore be mentioned here only in passing. Nobody denies the influence of the other agencies just listed, but its extent has not been fully measured. Museums and libraries are constantly expanding their services.

Efforts are continually being made to use more adequately the opportunities offered youth for instruction and development in art and music. Every year more children and adolescents visit museums and art galleries, and more go to concerts and to operas whenever these are presented. The average museum constantly tries to present displays which will be of such vital interest as to compete successfully with other types of diversion. Moreover, the museum staffs send circulating exhibits from school to school and from place to place, and teachers take or send entire classes to museums from time to time.

Education in music received its first great impetus with the invention

of the phonograph. Progress has since been enormously accelerated by the radio. Knowledge of music and musical appreciation have both been directly affected. In spite of some worthless musical programs heard over television and radio, the average adolescent is hearing more good music and is receiving a better education in musical appreciation than any previous generation of adolescents has ever had. A generation ago, perhaps ten thousand people a year heard any one great orchestra, during the past year probably fifty million people heard the same group of artists. It is not uncommon for a small boy to walk along his paper route whistling arias from grand opera. Such universal musical education is something new. Adolescents often have large collections of records, many of excellent quality, to which they listen for hours at a time.

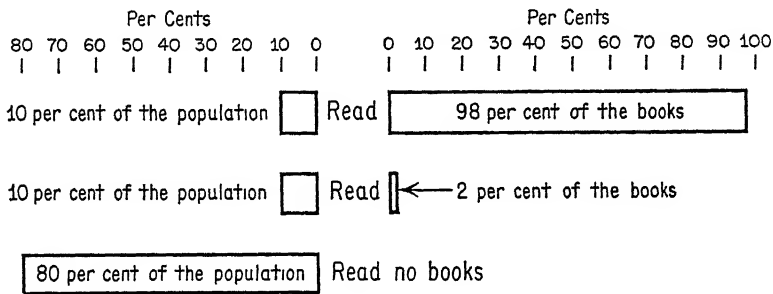


Fig 136 *Uneven Use of Library Facilities*

Based upon A. Campbell and C. A. Metzner, *Public Use of the Library and Other Sources of Information*, Institute of Social Research, University of Michigan, 1950, Fig. VIII

In the entire country there are nearly eight thousand libraries, with over twenty-five million registered users. Many children and adolescents still do not have access to libraries, but most of those do who live in a community of five thousand or more. A fairly recent study has demonstrated the extent to which people of different ages and degrees of education use the libraries. The first point to note is that their use is very unevenly distributed. Ninety-eight per cent of all the books taken out in a single year were taken out by the 10 per cent of the population that individually read the most library books. Eighty per cent of the adult population did not use the library at all. The situation is pictured in Figure 136. Throughout the school years children and adolescents take out books with fair regularity, but use of the library drops off sharply after pupils leave school. The amount of schooling also has an effect upon reading habits. In the general population, 27 per cent of the adults never finished grammar school, they furnish only 5 per cent of the regular users of the library. The high school and college graduates make up only 38 per cent of the population but fur-

nish 75 per cent of the library's steady customers. Either the amount of education has an effect in habituating pupils to the frequent use of books, or, what is more likely, those who already used and liked books were the ones who extended their education beyond the minimum requirements. Of the entire adult population, only 18 per cent had been in the public library during the year before the investigation, 44 per cent had used it in previous years, and 38 per cent had never used it. These figures suggest that the library is of great service to the community, but that it could be of greater service if use of its offerings could be spread a little more evenly.

There is no question that reading is still a major activity, in spite of the intrusions of television and radio into the free time of adolescents. In 1957, the children's division of the New York Public Library checked out three and a half million books, and in the same year the American Book Publishers' Council reported a 38 per cent increase in the number of books sold between 1954 and 1956. If further evidence were needed, one has only to glance at the array of pocketbooks on display at the corner drugstore. To be sure, some are worthless, but many are reprints of classics. They would not be on the shelves if there were not a strong demand for them.

It remains to point out one other way in which the community is contributing more and more to adolescent development. Schools and teachers are using community resources as never before. They are trying hard to relate education in school to life outside the school. One of the best techniques thus far developed is to use the community as an original source. Thus if pupils are to be taught about trade unions, they go to members of local unions for interviews instead of merely reading a chapter in a textbook. The study of history is often vivified by visits to historical sites in the locality. An understanding of different countries may be heightened by having foreign residents come into the classroom and tell about their homeland. Vocational counselors often send pupils to visit local industries and to interview local businessmen. Pupils may learn mathematics by following construction work that is being done in the neighborhood. Excursions to police stations, courts, garbage disposal plants, or license bureaus throw light upon civic problems. In some towns the high school students take over the city government for a day, after going through all the processes of electing their officials. Such activities appeal to pupils as being "real" rather than just practice. Moreover, they help to integrate life in and out of the schoolroom.

Community surveys are now used as a basis for curricular developments. Teachers and students study the industries and the needs of their community and its environs. Committees on the course of study compare the results with the curricular offerings to find out if these are adequate to prepare pupils for the life of their locality. Such contacts between school and community are most helpful in adjusting education to life's needs.

During the college years of one of the writers contacts between the college and community were relatively few, and when they occurred at all, their existence was due either to accident or to voluntary effort on the part of an individual student. The life of the college went on by itself, and the townspeople pursued whatever interests appealed to them, the only points of contact were the local churches (attended by a few of the students), the families and friends of students who lived in the community, and the various residents who worked in noninstructional positions at the college. In general, however, the college was a self-sufficient world that was tolerated by the community because of the business it brought. For the most part the two groups simply ignored each other, but if there was any feeling, it was usually one of distrust, based largely upon ignorance of each other's activities and interests.

Recently the same writer had occasion to observe the college scene again. In the intervening forty years the community had become the laboratory of the college, and the college had become a means of self-expression for the community and a source of help in time of need. Students in the statistics classes obtain their material from the records of the city offices, students of political economy and economics make surveys of the city or county, psychology students test the school children, and youthful dietitians get their first practical training in the city hospitals. Little children from the community come to the college's nursery school, older ones come to Saturday morning classes in dancing, swimming, or other sports taught by college students, and high school pupils use the college library. Every few days a bus brings youngsters coming to look at the collections in the art museum. The community often asks members of the faculty to give lectures on their specialties, to serve on the school board, to assist the park commissioner, and to man the voting booths on election days. The college play that was currently being rehearsed had this cast: four students from the college, some girl's boy friend who drove over from a nearby technical school every week end for rehearsals, a druggist, a housewife, and a retired doctor from the community, plus one of the college gardeners and the college postmaster. The play, when given, would be open to the public. When a community committee was appointed by the mayor at the request of the local court to look into the causes of juvenile delinquency and to suggest possible preventive measures, the mayor selected five citizens and asked the college to select for him two students and two members of the faculty to join the townsmen. The college paper carries a column about what goes on in the city, and the city papers carry a column about affairs at the college.

In short, the college has learned to serve the community and the same time to use it as a source of raw data for study. In one very popular class the students each year first meet with representatives from the community to plan a survey. They then make a house-to-house canvass, tabulate the results, and write a report to the original committee. At the end, the entire group meets two or three times to plan definite action on the basis of the report. As practical training for the students, nothing could be better. Incidentally, both the community and the college have been surprised and pleased to discover how much intelligence and skill the other possesses.

Another kind of interrelation between school and community is the

"community college," the two-year or junior-college pattern of post-high school education which is aimed at the needs of the adolescent who cannot devote four more years to schooling, or does not care to do so. The adults of the community who wish to continue their education and personal or professional development also derive help from the community college. This type of education tends in turn to contribute to the enrichment of the total community through its cultural resources and by formulating and stimulating higher goals for community development.

At all educational levels, the relationship between school and community becomes steadily closer as the years roll on. It is one of the movements that is making both high school and college work less academic and better adapted to the requirements of the average pupil, who is not a scholar and who needs to have education made real and of practical significance for his daily living.

Community Control of Negative Influences

The typical American community does not exercise steady, widely accepted controls over its adolescents. Adults of different economic and social levels more or less supervise their young people, according to varying standards of "proper" conduct, but there are wide differences in the desired, as well as in the effective, controls. If too much is expected of an adolescent in conformity and aspiration, his chances of failure are increased, if too little is demanded by the community, his potentials will lie undeveloped under a scattering of his resources in unproductive or even harmful activities. An adolescent who moves from one community to another may be caught in a conflict of community standards of behavior. Some investigators point out that even the dominant value patterns we speak of as "American" may be contradictory—acquisitiveness and democracy, a monotheistic religion and scientific inquiry, monogamous marriage and personal freedom—and that both the conception of and the means of attaining these goals are interpreted variously in the different subcommunities in which American adolescents move.⁵ When the goals are accurate reflections of the standards held by the majority of the adults, controls can be effective. The worst difficulties arise when the adults have one standard for themselves, but expect the adolescents to conform to controls that run contrary to easily observed adult behavior. Many foreign observers profess to see a complete lack of control of adolescents in America, but interest in the problem is growing and there have been some attempts on the part of small groups to cope with it. However, most communities lack adequate safeguards for adolescents.

⁵ J. F. Aubei and R. A. Harper, *Problems of American Society*, Henry Holt and Company, 1948.

For instance, an adolescent is usually able, by one means or another, to buy tobacco, alcohol, or drugs, indeed, in some parts of the country adolescent use of drugs has become a serious problem and a menace to normal development and health. There are laws against the sale of liquor or tobacco within a certain distance of a high school, but in these days of easy transportation, such laws have little effect. It does not take a high school boy long to learn that some of the young women he meets in the neighborhood of the school are prostitutes, he also finds out at an early age about homosexual men. Only doctors and juvenile courts are constantly aware of the tragedies that overtake those youngsters who cannot resist temptation. The blame lies fundamentally with the indifferent community in which these adolescents live. It does not matter how large or how small the community may be, opportunities for early indulgence will offer themselves. If it wants to badly enough, an alert and enlightened community can prevent many of the tragedies.

A community may also regulate its places of amusement. Some effort in this direction is usually made, but the laws are by no means rigidly enforced. In fact, the owners of places of amusement depend primarily upon the young people for support. The typical amusement park is probably the least harmful type of entertainment furnished by adults and consumed mainly by adolescents and children. Naturally, the character of such places varies with the ownership; many proprietors attempt to give reasonable protection to those who frequent their place of business. There are also public dance halls, night clubs, and roadhouses where reasonable standards are enforced, but no owner can afford to be too scrupulous if he wishes to keep his customers. Most such places offer practically no protection to the adolescent using them, and some make a direct appeal to the baser motive of boys and girls. Dancing is, in and of itself, a wonderful outlet for youthful energy and exuberance when the setting is suitable, where it can also help to satisfy the need for developing social skills and making friends. However, if healthy surroundings are not available, adolescents may have to seek unsuitable environments and find their energies diverted into less desirable channels. The community that permits dance halls with low standards of morality, unsupervised night clubs and roadhouses, salacious burlesque shows, and the like, can expect a harvest of adolescent moral collapse that is largely its own fault.

Finally, there are the various places maintained by organized vice. Houses of prostitution, gambling rooms, poolrooms, and the like, damage thousands of adolescents every year. The dangers connected with the house of prostitution are too obvious to need comment. Adolescents lose money on gambling machines, horse racing, dog racing, roulette wheels, crap shooting, and card games. Gambling is often carried on openly if illegally, with the authorities looking the other way most of the time and contenting them-

selves with sporadic raids. The community in which the laws are "liberal" can expect some of its adolescents every year to be forced into stealing in order to meet debts incurred through gambling. Some of them commit suicide. Boys and girls of high school age do not have the judgment, the knowledge, or the financial resources to gamble with safety. There is nothing inherently wicked in shooting pool or playing billiards, the trouble comes from the nature of the adults who hang around the average poolroom. In its indifferent attitude toward organized vice many a community sows the wind and reaps the whirlwind.

Perhaps the greatest handicap to normal growth in a large city, or in any area where people live crowded together, is an entirely unintentional and fortuitous accompaniment of urban life. Cities may be fine places for adults, but without a good deal of modification they are not suitable for children and adolescents. On the one hand, they do not offer any variety of safe, healthy outlets for childish and youthful energy, and, on the other, they offer too much adult stimulation and too soon. The net result is often a surface sophistication that arises from too much and too advanced contact with adult thought and attitudes and too little healthy nourishment of young emotions. Above all, urban life does not provide harmless kinds of thrill and excitement. Some children and adolescents are overstimulated by the adult world around them, some are bored by it, some are resentful of it, and some are stifled by it. The ever-present, inescapable pressure of the adult world is probably the greatest single handicap to healthy development of the city child. The story below illustrates a common situation.

Bill F. was twelve years old when he first came to the attention of the juvenile court in a large city. The misdeed for which he was arrested proved to be more a comedy of errors than a crime, but the intention behind his activities was definitely criminal. Just before closing time one evening he had slipped unseen into a drugstore, crouched down behind a counter, tied a bandanna over his face and a pair of wooden blocks on his feet (to make him seem taller), put on gloves, and seized a pair of cheap cap pistols. Thus accoutered he waited a few moments until the store was empty and then rose, like Venus from the waves, nearly scaring the druggist into a fit. Subsequent events soon offset the magnificent entry, however. Bill had not realized that his voice was still a childish treble until his "Hands up, or I'll shoot!" sounded unconvincing even to his own ears. As he spoke, the bandanna fell down, and in his embarrassment he fired off his pistols, making a noise that bore about the same relation to a real pistol shot as his voice did to a man's shout. The druggist, seeing now with what he had to deal, charged at Bill, who promptly tried to run away, but one of his wooden blocks fell off while the other hung on just long enough to trip him. The druggist grabbed him up by the seat of the pants and held him upside down while telephoning the police to come to collect the young marauder. Aside from possible strain to the druggist's heart, no harm was done, but everyone concerned felt that Bill's state of mind needed attention.

Upon investigation, it appeared that, in the main, Bill's home and environment were good—from an external viewpoint. His parents were separated and he occupied a small apartment with his mother. His father lived in another apartment only a few blocks away. From the age of eight, Bill had had a key to both apartments. He often spent Sunday with his father. His mother was head of a department in a large store. Six days a week she was up before Bill was, made a pot of coffee, ate a meager breakfast, and rushed off to work. Because he was underfoot, she purposely did not waken Bill until she was on the point of leaving. About half the time she picked up a meal from a delicatessen on her way home in the late afternoon, on the other evenings she and Bill went to a restaurant. The apartment was so small that there was really no room for Bill in it. He slept in a bed that let down from the wall in the living room, kept his clothes in one of his mother's bureau drawers and in a corner of her closet, had no space of his own, and owned almost no toys. There was no place to keep them nor any place to play with them.

Bill usually drank warmed-over coffee for breakfast, supplementing it with cookies, leftover cake, or crackers. His mother left fruit juice and milk for him, but for years he had poured them down the sink. After browsing through the paper he pushed his bed back into the wall, rinsed off the dishes, and went to school, where he remained until three thirty. He loathed the nutritious school lunch and often patronized the corner drugstore instead, making a lunch from soft drinks, doughnuts, and cream puffs. Bill's schoolwork was satisfactory, though below his capacities, his manners were above reproach, his clothes were faultless, and he had never been a disciplinary problem. His teachers had, however, sensed in him a rather sneering attitude toward school, and his age-mates regarded him as "stuck up." He had no interest in games and thought the Boy Scouts were "kid stuff," but he had never made any real trouble during school hours, except for the fact that he had to be watched at lunchtime. If he could not slip away unseen, he bowed to necessity in a polite way and ate the school lunch. After school hours he went, usually alone, to the movies. During the previous year he had sometimes substituted watching television, usually in a bar. Saturdays he remained in bed until noon reading detective fiction and westerns, and spent the entire afternoon at the movies. On his way home, he bought two or three tabloids and read them until his mother came home. She often had visitors in the evening, mostly other women from the store and sometimes their husbands. There was no place other than his mother's tiny bedroom or the bathroom or the minuscule kitchenette for Bill to go, and he could not retire because the guests were sitting right where his bed would descend, consequently he listened to adult conversation, drank a diluted cocktail, and leafed through magazines. Most of the time he was bored but sometimes he picked up nuggets of sophistication.

As long as he could remember, Bill's only free play had taken place in the streets. It was rarely very active, partly because a downhill slope made running dangerous for small children, partly because the same slope made all games involving the use of a ball impossible, and partly because Bill learned early in life that the best way to win approval from his pretty young mother was to keep his clothes clean. The "play" consisted in a little mild roughhousing among the boys, a good deal of storytelling and wisecracking, and an occasional hopping on a truck for

the ride. Bicycles or wagons were utterly impossible, and the basements of apartment houses do not include space for children's workshops. The nearest park was distant, and the activities of the boys, once they got there, were so wild and unrestrained that Bill was not interested in accompanying them. By the time he was eight, the movies had become Bill's chief form of "play," with the radio his second choice.

Bill's mother was a pleasant though superficial person, his father was a well-intentioned but sophisticated man, his neighborhood was better than average but without outlets for children's interests, and his school was excellent in caring for Bill's mind and body. But nowhere except at the movies and in the tabloids did Bill's emotions get any outlet. He was as neglected as any tenement child. His normal emotional drives were blocked. He could not identify himself with his father, because he knew that his father drank, gambled, had mistresses, and—while invariably kind to his son, in a casual sort of way—was not an admirable character. Bill's emotions were already stunted and blighted, although his callousness had no cruelty in it, only indifference, it was marked in one so young. His only comment after reading a nauseatingly detailed account of the murder of a prostitute was, "Well, I guess the bitch asked for it." What emotional life Bill had left was due to the movies, which gave him something to feel. They also presented him with the notion of holding up a drugstore, but this negative contribution is of minor importance. He could have obtained the same or similar ideas from other sources, but only the movies kept the tepid bath of adult indifference in which he lived from killing his emotions altogether. Bill was a normal child, his mother was a normal woman, his home was a "good" home—but his whole life was hopelessly wrong.

Bill's essay into crime did not seem to have been motivated by desire for money, for revenge, or for prestige. He did not belong to a gang, and most of his acquaintances were unlikely to respect him for acting like a hoodlum. What he wanted was to "feel" like a desperado, to experience one episode of acute emotional pleasure, to escape just once from the dull life that he had to live, and to identify himself in a realistic way with the only "he-men" he had ever come in contact with. In short, Bill's motives were normal, and he was not a real delinquent, although he could readily have become one.

Epilogue. This account was written some years ago. At the present time a postscript is possible. Fortunately, Bill's parents had plenty of money and could send him away to a school in Wyoming, where he probably made less academic progress than he would have made at home, but where horseback riding and marksmanship were part of the curriculum. For six years Bill remained in the Great Open Spaces, living what to him was an exciting life, until he was ready to return voluntarily to the city in order to go to college. There has never been another delinquent episode. Bill's fantasies were no longer necessary because reality was so exciting that he did not need them. He is now a normal young man who bears little resemblance to the pale, sophisticated, overrepressed little boy who tried to save his soul by holding up a drugstore.

Adolescent Contributions to Community Life

The adolescent is an active force in his community, often for positive and constructive goals. Young people have set up Junior Achievement Groups to produce and market co-operatively, in the open market, their own inventions and examples of their craftsmanship. A group of San Francisco teen-agers has started a Teen-age Academy of Arts, to include all high school and junior college students creatively interested in arts and crafts. Teen-agers act as instructors in boys' clubs and settlement houses. It is well to accent the contributions of young people in their communities. They face problems and opportunities of great scope. Some are able to manage a very realistic estimate of their own situation. One young collegian stated his position as follows: "Ours is an age of introspection and self-evaluation. We are constantly prodding the most enshrouded depths of our conscious as well as our unconscious. We may conform, but we know it."⁶ The over-all—indeed, world-wide—picture was presented vividly by a great scientist of the present older generation: "What is new is that in one generation, our knowledge of the natural world engulfs, upsets, and complements all knowledge of the natural world before. The techniques, among which we live, multiply and ramify so that the whole world is bound together by communication, blocked here and there by the immense synapses of political tyranny."⁷ In this new world each adolescent will further develop some aspect of community life, will reflect some of his community's inadequacies, will absorb some of his community's traditions, and will become a citizen of an expanding world.

Through such activities as volunteer programs, summer positions, and group leadership of younger children adolescents could make even greater contributions to their communities. At the peak of their young excitement about ideas and arts and societies, they can bring vitality to almost any program that is flexible enough to accept and sustain them. Most boys and girls have a great need to "belong" and to "serve." They have, therefore, something to contribute to their communities. A suggestion of the part they could play is given by the diagram in Figure 137. Here they are shown both using facilities and planning for their wider usefulness.

The Adolescent and Tomorrow's Problems

One of the immediate and extensive problems to be faced in the community by the young people of the 1960's is the prospect of major economic changes and social reorientations which will be brought about with the increasing development of technical means for the production of

⁶ O. Butz, *The Unsilent Generation*, Rinehart & Company, 1958, p. 174.

⁷ J. R. Oppenheimer, *The Open Mind*, Basic Books, p. 141.

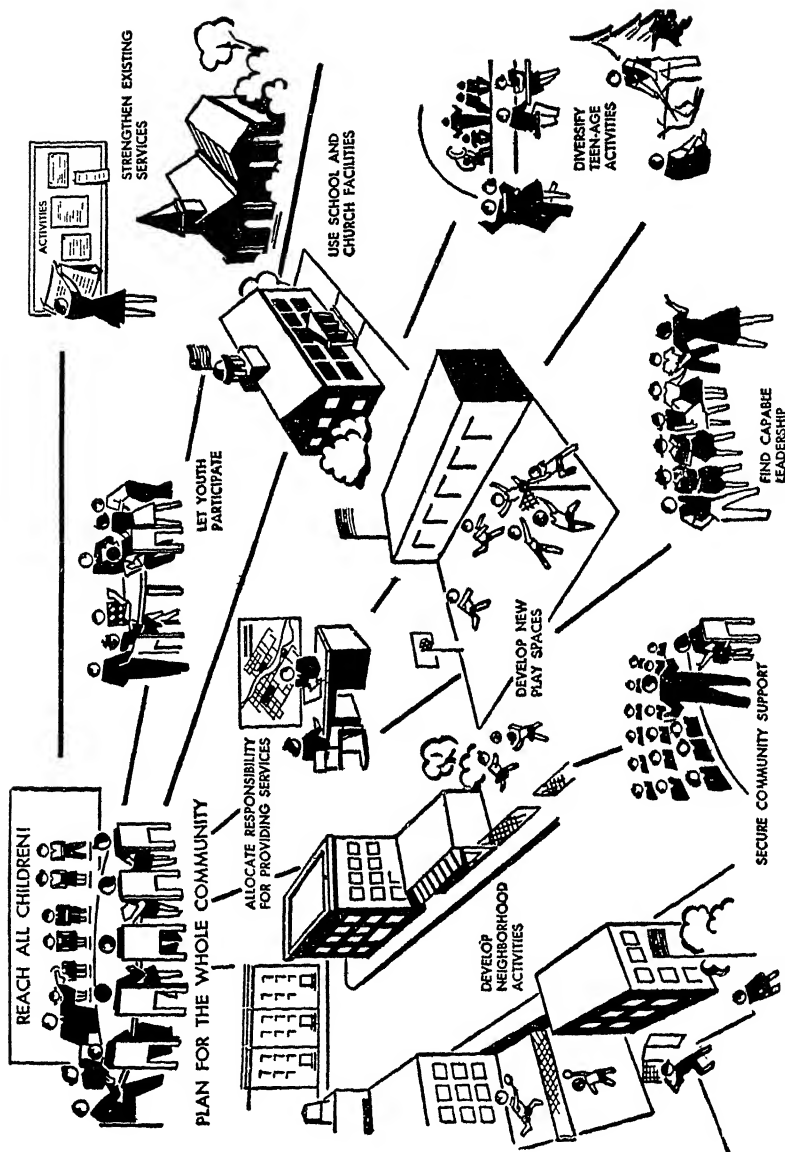


Fig 137 *Ten-Point Program for Developing a Community Recreational Program for Young People*

M W Wells "Youth and Your Community," *Public Affairs Pamphlets*, No 108, 1948, pp 16-17

goods and services. The imminent advent of automation, already felt in some areas, will make unnecessary the services of millions of workers at the semiskilled level, parallel advances of technology will demand, on the other hand, large numbers of highly skilled technicians in a wide range of fields. Whole new work-classifications are developing—the “programmer” for electronic computers, for instance. The man who merely punches a lever all day can soon be replaced by a machine that is quicker and more accurate. Along with these changes can come a greater leisure for more people. It is the responsibility of the communities and schools to prepare the adolescent for participation in the beneficial and creative use of that leisure. It is also a community-wide—and ultimately a world-wide—problem to control the development of these emerging social patterns so that young people do not find themselves confronted with the need for making major adaptations before they are prepared to do so. To equip the adolescent of tomorrow for tomorrow’s world has become a matter of looking much farther ahead, making far more comprehensive plans, and examining much more closely the real processes of change than any society has had to do in the past, if misfits and major community disruptions are to be avoided.

From 1946 to 1955, production increased 71 per cent with only a 12 per cent increase in the labor force, thus the potential for the future is enormous. But this production must be used effectively if the great promises it holds are not to bog down in individual tragedies. The picture in Figure 138, taken during the depression of the thirties, shows a scene that may again become a common sight—the adolescent with no job, not because he is not willing to work but because there is no work for him. The corrosive effect of such enforced inadequacy in his community role is not limited to the isolated youth but spreads through the society of which he is a part. Automation can bring with it either unemployment or greater leisure.

While each generation has always had some special threat to its survival—tomahawks until as late as a century ago or dive bombers for the last generation of young people—the teen-agers of the twentieth century are the first to grow up under the menace of total extermination for themselves and their world—and with absolutely no direct control they can exercise themselves to avert the disaster. Furthermore, no previous American generation has known as a commonplace horror the attempted extinction of whole races and classes of people, or seen, with eyes accustomed to reading figures in the millions, accounts of the lethal range of weapons which can take a hundred thousand lives at one blow. Yet the daily context of adolescents’ lives takes little notice of these immensities, and even those who guide young people toward long-range goals are only dimly aware of the profound revolution in living which is inevitably ahead of them because of the extension of technological achievements into the structure of their working lives and living styles. Here are threat and challenge, menace and



Photo by Vachon

Fig 138 *During the Great Depression*

From H M Bell, *Matching Youth and Jobs*, American Council on Education, 1940. Used by permission of the Council

miracle, as there have always been—but on an unprecedented scale in a culture in which Mach 2 is as familiar to today's adolescents as mph was to their fathers

If schools are to fulfill their obligation to educate toward greater command of self and environment, they must help the developing citizen toward perceiving his possibilities of active participation in the elective and positive aspects of his developing world. Speaking on a radio broadcast soon after the launching of the first earth satellite, a prominent educator thus defined some of the problems and potentials of education⁸ in an expanding world: the early identification and scientific education of potentially gifted scientists, the reinforcement of the available mass-communication stimuli in science education (such as television, motion-picture, and radio programs) by concrete, disciplined science courses in our schools, and the provision of gifted and adequately paid teachers for adolescent secondary school and college students, who are expected to be over twice as numerous by 1970 as they are in the already crowded secondary schools of 1959. These young people will be coming from a greater range of subcultural backgrounds than have any large college populations in the past. They will bring with them a greater amount of experience in living with people of many cultural, racial, and economic backgrounds than their predecessors have had. However, it remains essential for the school to provide historical and cultural frames of reference for integrating and expanding this knowledge at the same time that they give the training in human relationships necessary to understand and develop their widening contacts with the world. The adolescent of the mid-century must learn to function within a wide range of responsibility and to grasp the great challenge of living in a world in which another youngster at a distance of 10,000 miles—three hours away by jet transport, seconds away by radio on many of the 145,000,000 sets in the United States—may both influence, and be influenced by, his own daily living pattern.

Summary

The community is important in conditioning the development of adolescents, more especially those that have left school. Communities have both defects and merits, some of the former are perhaps unavoidable, and some of the latter are not always as conspicuous as they could be. As soon as boys and girls leave school they become dependent upon the community not only for work but for diversion. It is in the matter of providing for constructive uses of leisure that a community can have the most direct influence upon its young people. Communities are more and more contributing

⁸ R. Allen, "Sputnik and the Student," *University Explorer Broadcast* 3705, U E 1,591, 1958

indirectly to adolescent happiness and security by their co-operation with schools in providing adolescents with a type of education best fitted to adapt them to community needs. In view of the great technological developments of the last two decades, it seems reasonable to suppose that the wider community of the world will impinge more and more upon the little world of the adolescent and that he will have to learn how to live in many new interpersonal relationships.

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PART SIX

**Educational
Applications**

23

The High School Population

The American high school is a unique institution. It does not correspond to any of the secondary schools of Europe, although it is their lineal descendent and was influenced by them in its early years, especially by the secondary schools of England. It started in the same tradition of an intellectual aristocracy, but since 1900 it has changed its nature. American colleges and universities were also originally imitations of such institutions in Europe, especially those in Germany, but they too have broken away from their ancestral type. Although the high school is a fairly venerable institution as far as mere age goes, its characteristic modern development dates from after World War I. Almost exactly sixty years ago the husband of one of the writers was unable to attend high school in the Borough of Manhattan in New York City because there was no high school there. At present, the same district has over 25 high schools enrolling 250,000 pupils. This same mushroom growth has taken place all over the country. In fact, the high school has grown so rapidly that its aims and courses have had to be altered from one decade to the next in order to adjust it to the needs of the students. Similar changes at the college level came a little later and have been of a parallel nature. In both instances, the main precipitating factor has been the enormously increased enrollments. An education that was appropriate for the seven adolescents in each hundred between the ages of fourteen and eighteen who attended high school in 1869 is not in the least suitable for the eighty-seven to ninety in a hundred who will enter high school in 1959. Similar changes in enrollment and in the nature of the student population have occurred at the college level, but the increases came about a decade later. The first point to consider in this chapter is the record of enrollments at different periods and of the relation of these enrollments to the total increases of adolescent population.

Size of High Schools and Colleges

Until 1889 the high schools were small and few. A gradual growth took place during the two decades from 1889 to 1909, but it was not until

1919 that the first spectacular increase occurred. This sudden growth was followed by further accretions until the beginning of World War II. After 1941 enlistments in the armed forces and employment in war industries cut down the enrollments in the high schools and colleges. The totals in 1949 were almost a million below those of 1939. This decrease was, however, only temporary. By 1950 the high schools had recovered their losses

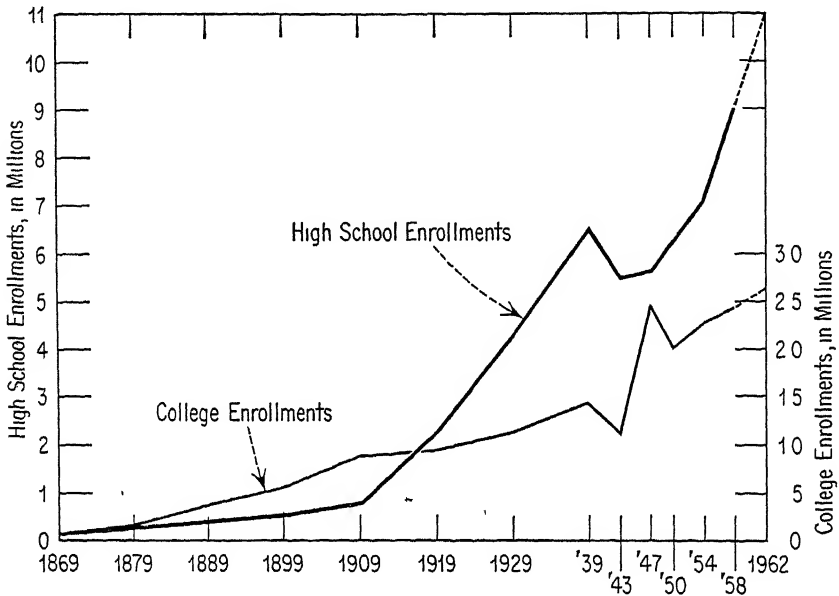


Fig 139 High School and College Enrollments

Based upon figures from the United States Census Reports in *The World Almanac*

and had again started to grow. Because of the high birth rate during and just after the war, it is estimated that by 1959 or 1960, when the bumper crop of "war babies" reaches high school, the enrollment will be not far below 11,000,000.

The colleges begin their record according to the census in 1889, when there was an enrollment of barely 100,000. The growth was slow until after World War I, reaching about 890,000 by 1919. In the next two decades the colleges almost doubled their population. During World War II, most men of college age were in the armed forces, but on their return, and thanks to the allowances made under the GI Bill for their continued education, the numbers rose to 2,225,000. This high point was followed by another decline to a normal proportion of the adolescent population. It is estimated that the "war babies" will swell the college ranks to a total of

3,000,000 by 1962. The changes in enrollments for both high school and college are shown in Figure 139. No other country in the world has such a record of educational holding power. The American high school has achieved its size partly as a result of extending the compulsory school age to 14, 16, or 18, but it has also made great changes in its offerings, so that pupils remain in school, even after they have passed the age at which they could legally leave.

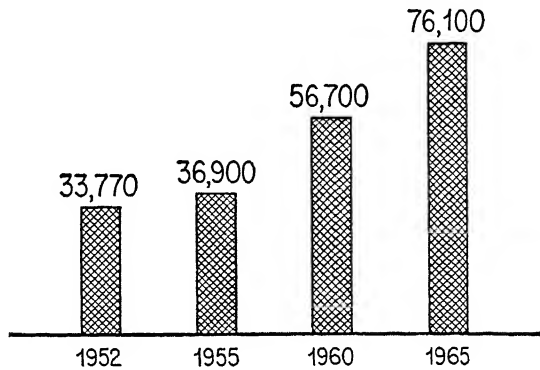


Fig 140 *Increased College Enrollments in One State*

Based on *Statewide University*, Vol XVIII, No 1, 1954. Published by the University of California

The colleges and universities give bachelor's degrees, and the latter give master's and doctor's degrees. The A B comes at the completion of the normal four years of college, the M A at the end of a fifth year, and the Ph D at least two years later—and usually five to ten years later. In 1890 15,539 seniors received an A B or its equivalent, in 1954, 292,880. During the same interval the number of master's degrees conferred rose from 1,009 to 56,823, and the recipients of doctor's degrees developed from a mere 126 to 8,996. These figures show that education on the higher levels has also had the same mushrooming growth as that which occurred earlier in the high schools. Figure 140 gives a graphic picture of the development within a single state. This university is, at the time of publication of this book, already over 45,000. With increasing interest in higher education and with the arrival of the babies born during World War II, the enrollment in 1965 is expected to be 60,000. The relative estimates for this one state hold equally for the rest of the country.

One method of demonstrating the extent to which schools are holding their pupils is to compare the number of adolescents in the total population with the number in high school. The more pupils there are between four-

teen and eighteen in high school, the greater is the holding power. This relationship is shown in Figure 141. In 1889, only 7 adolescents out of each 100 were in school. Ten and twenty years later, the figures were 12 and 15, respectively. By 1939, the number had risen to 73. In 1949, it was 82. Now (1959) it is 88. In short, the high schools are approaching a perfect record

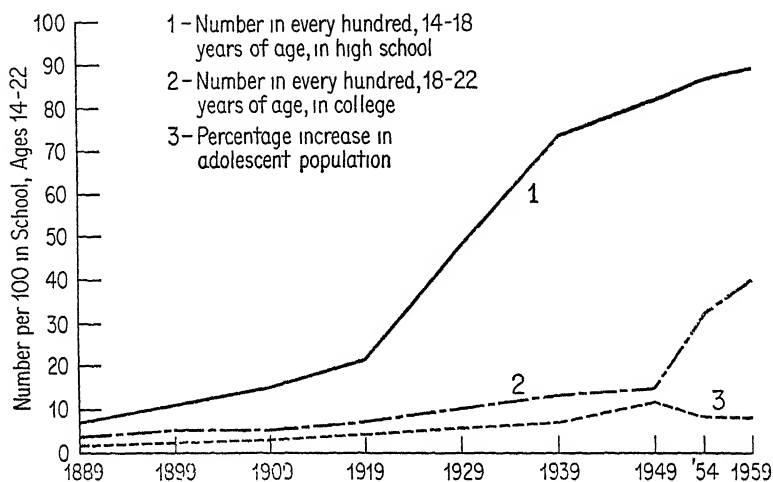


Fig 141 *Proportion of Adolescents in High School and College, 1889-1959*

Based upon figures from the United States Census Reports in *The World Almanac*

Naturally, the proportion of those between eighteen and twenty-two who are in college is much lower, but here also there has been a marked increase. As late as 1929 only 10 persons in each 100 in that age range were in colleges or universities. The proportion has shown great increases since 1949 and has now reached the imposing figure of 40 in every 100.

Range of Abilities in High School

Almost any entering class of freshmen at the high school level may be expected to show a wide range of intellectual capacities. The results in Figure 142 are typical. The mental ages range from that of an average fourth-grade child to that of an upperclassman in college. If the high school were ever a highly selected group intellectually, it is certainly so no longer. A teacher now teaches a cross section of the population with almost as great variability as is found in the lower grades.

The question of what effect the increases in enrollments have had upon the average and the distribution of intellectual abilities was assumed until

recently to have been settled, but upon logical rather than empirical grounds. The argument ran as follows: The pupils in private academies and such high schools as existed in 1890 were highly selected and highly intelligent, they were the children of people above the average in wealth, and since intelligence is related positively to income, they were presumed to be above

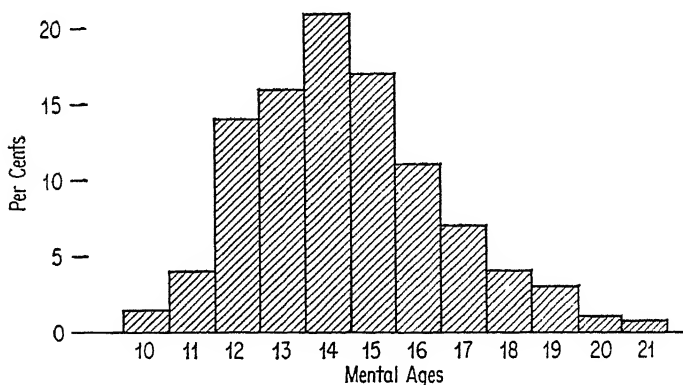


Fig 142 *Distribution of Mental Ages among Entering Freshmen in a High School Serving a City of 50,000 and the Surrounding Countryside*

From unpublished data collected by one of the writers in 1953

average in intelligence, inasmuch as the secondary schools already enrolled pupils from the upper intellectual strata of society, any addition must have come from the lower levels, with a presumed lower general ability, the average for the enlarged secondary school group would therefore be reduced. This argument seems to have been fallacious, so far as one can judge from available proof.

What empirical evidence exists as to changes, if any, in the level of intelligence comes from the results of intelligence tests, which were not in use until about 1915. One is therefore limited to consideration of the past thirty to thirty-five years. The best single investigation presents evidence of two kinds. The first is shown in Figure 143. Each dot represents the average IQ of an entire high school population measured by a recognized test of intelligence at some date between 1916 and 1942. There are thirty dots. The median of the first fifteen gives an IQ of 105, the median of the last fifteen is also 105. The "change" is therefore nonexistent.

The second line of evidence consists of the comparison of results obtained in a city high school by the repetition in 1942 of a test given in 1923. The main facts are presented in Figure 144. The increase in the general population of the school district for those between the ages of fourteen and eighteen was from 1,818 in 1920 to 3,022 in 1940, or 66 per cent. The high

school enrollment, however, rose from 621 to 1,321, or 112 per cent, between the same two dates. The enrollments grew, therefore, nearly twice as fast as the population of the appropriate ages was increasing. If attendance were based on intelligence, then the earlier group would be the more highly

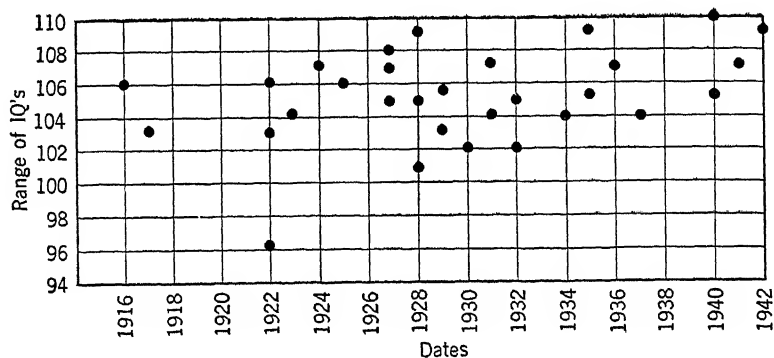


Fig 143 *IQ Averages for Thirty High Schools Tested between 1916 and 1942*

From F. H. Finch, "Enrollment Increases and Changes in the Mental Level of the High School," *Applied Psychology Monographs*, No. 10, 1946, p. 10. Used by permission of the publisher.

selected. Test results, however, show a very slight increase in median from 65 to 69 points, and a slightly smaller range for the middle two thirds of the distribution, 51 to 87 (36 points) instead of 46 to 84 (38 points). The 1,321 pupils in 1940 were nearly two months younger than the 621 in 1920. Since

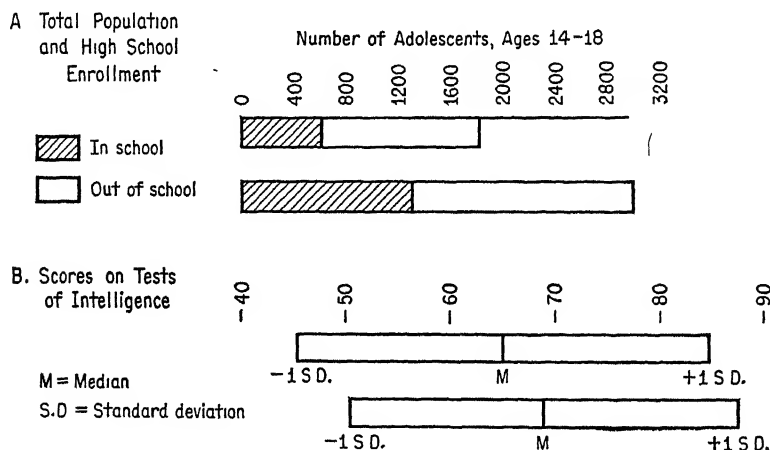


Fig 144: *Enrollment Changes and Mental Level*

Based on Finch, *loc cit*, pp. 42, 45

intelligence scores rise with increasing age, the difference in favor of the 1940 group is actually a little more than it appears to be in Figure 144. In any case, there is not the slightest evidence that the inclusion of a higher percentage of the available population has resulted in an appreciable decrease in average intellectual capacity.

Such evidence of developments since 1915 makes one suspicious of the assumptions concerning the high degree of selection in 1890, or at still earlier dates. Quite possibly the small enrollment at that time represented certain social classes containing children of all degrees of mental capacity rather than certain intellectual levels drawn from several social and occupational groups. Since the development of tests it has been demonstrated conclusively that while intelligence does show a rough correlation with family income, the total distribution of abilities from all income groups is almost the same, and that the overlapping from one such group to another is so great as to make the slight difference at the average of little significance. It was also shown many years ago that nearly half the children in a very large number of those with IQ's above 120 came from families in the lower occupational groups.¹ It is true that those pupils who remain in school make a higher average score than those who drop out, but the difference is small and the total distribution for both groups is practically identical. One investigation, typical of many others, gives an average IQ of 105 for those who left high school, as compared with 107 for those who remained.² Such a minor variation is not enough to account for elimination from school. It is therefore probable that in the decades from 1890 to 1920, the differences in intellectual level between in-school and out-of-school adolescents were greatly exaggerated. During these decades boys and girls could get good jobs if they left a school in which the curriculum was too narrow to be interesting for most adolescents. The proportion in each generation that can and will complete four years of Latin and three each of Greek and mathematics is very small and by no means coincides with the highest 10 per cent in the distribution of intelligence. Such a curriculum selects those of genuine scholarly tastes to whom such a curriculum is exciting, plus those to whom the prestige of a diploma is worth the hours of boredom necessary to obtain it. The group in 1890 was certainly "selected," but quite possibly upon social and economic rather than intellectual grounds. Indeed, in view of the curriculum, perhaps the brightest of the nonacademically minded pupils were the ones who left! One cannot produce objective evidence on this matter of selection before 1915 at the earliest, and arguments without data are notoriously fallacious. All one can say is that decreases in intelligence

¹ S. M. Stoke and H. C. Lehman, "Intelligence Test Scores of Social and Occupational Groups," *School and Society*, 31:372-377, 1930.

² C. B. Smith, "A Study of Pupils Dropping Out of a Midwestern High School," *School Review*, 52:151-156, 1944.

do not seem to have occurred since 1920, although the population of the high school has more than doubled since that time

Withdrawals from School

Not everyone who enters high school remains long enough to graduate, especially in states in which the compulsory age limit is fourteen or sixteen. Withdrawal may be for involuntary reasons: departure of the family for another state, or entrance of the adolescent into a private school, a reform school, a sanitarium, or a mental hospital, or his death. In a study covering withdrawals from the high schools of ten typical cities of 200,000 or over (also three cities of over a million inhabitants, results from which are not included in this summary), the total percentages for withdrawals for voluntary reasons was found to be, for four successive years, 4.7, 9.7, 11.4, and 8.0.³ These pupils withdrew because, for some reason, they wished to do so or felt they must.

A study covering withdrawals in an entire state gives typical results.⁴ The ages of 1,296 withdrawals during a single year varied from thirteen to eighteen, only 16 per cent withdrew before sixteen, 46 per cent at sixteen, and 38 per cent after sixteen. The entire group had IQ's ranging from below 85 to over 115, with an average at 92. This figure suggests that one reason for leaving school is sheer lack of ability, since the average is twelve points lower than the 105 that is customary for those who graduate from high school. Over a third of the students who withdrew had repeated at least one grade and a few had repeated as many as three. About one fourth of these students were doing A or B work in high school, about half of them were doing C work, and the remaining fourth either D or failing work. These last two items indicate a difficulty in mastering school material. But failure is clearly no more than a contributing cause, since three fourths of the pupils were making at least satisfactory grades, and some were doing very well indeed.

A few investigators have followed the voluntary dropout, talked with him, studied him, and tried to determine his real reason for leaving. One sample study of this sort will be briefly summarized since it gives more detailed information than do most of the more recent ones.⁵ During the first semester of 1948, a large city high school held 1,367 of its pupils but lost 96, or 6.6 per cent, through withdrawal. Of this number 60 were boys, and 36 were girls. This ratio of two to one is customary and suggests that there is more to the matter than variation in intelligence. Perhaps it is a reflection

³ D. Segel and O. J. Schwarm, "Retention in the High Schools in Large Cities," U. S. Office of Education, Bulletin 1957, no. 15, p. 5.

⁴ S. E. Hecker, "Early School Leavers in Kentucky," *Bulletin of the Bureau of School Service*, College of Education, University of Kentucky, Lexington, Vol. XXV, no. 4, 1953, 78 pp.

⁵ J. A. Lanier, "A Guidance-Faculty Study of Student Withdrawals," *Journal of Educational Research*, 43:205-212, 1949.

tion of the higher verbal ability among girls, but the writers are inclined to prefer a second explanation—a girl often feels that she can make a better marriage and can become more successful socially if she finishes high school, and so she tries harder than her brother and is far less willing than he to leave school, even though the classwork may bore her just as much. This motive is especially strong among girls from low socioeconomic backgrounds who hope to advance socially through marriage. Moreover, as long as a girl remains in school she has at least casual contact with dozens of boys, but if she leaves and goes to work, her main business contacts will be with other girls or with married men. The follow-up study of the 96 withdrawals included both analysis of their records and personal interviews with them. The average IQ of the group was 95, as compared with an average of 101 for pupils in the trade school and 105 for pupils in grade 10 of the academic course.⁶ The dropouts showed, however, especially low scores on verbal parts of the intelligence tests, and they made markedly lower scores in reading than students of identical IQ who remained in school. Eighteen per cent of the dropouts came from non-English-speaking homes, as compared with 10 per cent for the whole school, and the great majority of them came from inferior homes. The reasons given in the interviews are listed below. Some of them are repetitions of the familiar reasons, or excuses, but there are a few new ones.

- 1 Wages were needed at home
- 2 Student had been working after school and liked the work better than school
- 3 Student was discouraged by making low test scores and by failing courses
- 4 Student felt he did not "belong" in the high school group
- 5 Sickness in home required presence of girl student there
- 6 Student showed severe personal maladjustment to school life. Hated school. Felt rejected. No sense to studies, etc.
- 7 Student wanted to make money for self, as part of revolt from parental domination
- 8 Student got such low grades he was ashamed
- 9 Student felt tired all the time, could not get enough sleep
- 10 Friends already out of school. No personal friends among classmates
- 11 No fun in school any more
- 12 Dislike for study, inability to prepare lessons or to read textbooks made school too difficult
- 13 Student older than others in class
- 14 Teachers not fair, picked on student, made no effort to help him
- 15 Student unhappy both at home and at school, resentful toward parents and teachers.⁷

⁶ The average for grades 11 and 12 of this course were 107 and 110, respectively.

⁷ See also, R. E. Ifert and R. Axen, "Dropouts: Their Nature and Causes, Effects on Student, Family, and Society," in the *National Conference on Higher Education*, 1956, pp. 94-103, and E. S. Cook, "Analysis of Factors Related to Withdrawal from High School Prior to Graduation," *Journal of Educational Research*, 50: 191-196, 1956.

These reasons make more sense than those thus far considered, mainly because they concern students' attitudes toward school. A pupil leaves primarily because he is discouraged, unhappy, socially isolated, and maladjusted. There is more than a suggestion that the dropout has an abnormal personality structure, especially in his generous use of projection and in his hostile attitude toward his teachers and family.

One further study gives more information about the problem of withdrawals from school. A comparison of 154 pupils who dropped out of school and 257 who remained indicated that the former were less socially acceptable to their peers and were appreciably more maladjusted. On a test of social acceptability they scored significantly lower. This report suggests that the reasons for withdrawal are largely personal and social.⁸

The figures above are about groups of pupils, and they leave out of account many problems of emotional and social maladjustment. The studies given below are included to show how such maladjustments operate in individual cases. One is from the high school level and one concerns elimination from college.

Justine entered high school at the age of sixteen, with a record of two retardations in elementary school. During the primary grades her work had been fair, but from the fourth grade on she had received poorer and poorer marks. The comments made by her successive teachers showed a progressive deterioration of personality, presumably the result of her chronic frustration. Her fourth-, fifth-, and sixth-grade teachers thought her a bit uncooperative, but believed that she did really make an effort to learn her lessons. Outside class, they found her pleasant and willing to help by doing little chores about the school. Her seventh- and eighth-grade teachers were almost unanimous in labeling her sullen and lazy. In all grades, however, Justine had been fairly popular with the other children, although she was not a leader. At the end of the first semester in high school Justine failed every course she was taking. She was therefore sent to a counselor for an interview. At first, the girl was sullen and uncommunicative, but presently she began to tell about her difficulties, once she discovered that she had a sympathetic listener. She did not hate school, but she was most unhappy in class. She liked the teachers well enough and the other pupils very much. She enjoyed games and various co-curricular activities. Her vocational ambition was to become a cook. Justine did not seem to understand why she could not do the schoolwork that other pupils enjoyed—in fact, she appeared rather preoccupied with this problem. The counselor therefore gave the girl two tests of intelligence and let her score them herself. Then the counselor and Justine went over the results and compared them with the norms. One might have thought the girl would be discouraged by the findings, but actually she was greatly relieved. She exclaimed at once, "Then I'm *not* lazy!" She was reassured on this point and

⁸ R. G. Kuhlen and E. G. Collister, "Sociometric Status of Sixth and Ninth Graders Who Fail to Finish High School," *Educational and Psychological Measurement*, 12: 632-637, 1952. For an account of the further elimination between high school and college, see R. F. Berdie, "Why Don't They Go to College?" *Personnel Guidance Journal*, 31: 352-356, 1953.

advised to elect a light program of courses that would lead directly to her vocational objective. Justine was co-operative and willing to be guided. She took only two courses—both in foods—plus classes in physical education, how to study, and remedial reading. She continued with her membership in three or four clubs. At the end of the year Justine passed her small amount of classwork, although by no great margin. At the beginning of her sophomore year the counselor found Justine a half-time position as assistant to the cook in a nearby bakery. Nothing was said about Justine's dropping out of school, but as the year progressed and she became more and more interested in her work at the bakery, she gradually stopped coming to class. As a means of keeping her social contacts, she continued to belong to one or two clubs and to play games with her former classmates. Instead of penalizing her for her nonattendance, the counselor let her drop the courses she did not finish. Justine's high school career petered out completely in the middle of what would have been her junior year if she had taken a normal schedule. By this time she had worked up to a responsible position in the bakery, she had many friends whom she had met through her work, and she had no more need for the high school. Justine has no sense of failure, she says that she went to high school as long as she wanted to do so and then left of her own accord. Her case was handled so wisely that she no longer feels frustrated or unhappy.

A rather good-looking but sulky girl came to her supervisor in a small college with the complaint that she simply did not like college and was unhappy there. It was evident after a few minutes of conversation that she had no interest in any of her courses. The counselor at first assumed that she wanted advice about further work in college, so he went through the catalogue, asking her if she would like to take this or that course that was open to freshmen. Nothing aroused the faintest spark. Indeed, as the possibilities for study were revealed to her, the girl grew more and more glum. Eventually, the counselor asked her what she intended to do after she was through college and received the surprising reply that she wanted to be a hostess in a night club. The counselor explained that college was no place to acquire whatever skills she might need, nor did he even know what the skills were, having always supposed that such positions were obtained mainly through being a friend of the owner of the club. He was also somewhat puzzled as to what helpful advice he could give. He told her he thought that she should withdraw from college, since the work offered had no bearing on her vocational objective, but this solution was not acceptable. The girl had got it into her head that at least a year or two of college was necessary for general social acceptance. She left the office still unhappy and even sulkier than before. A few weeks later she flunked out of college. At a final interview with her counselor she blamed her failure upon her teachers and complained bitterly about the unfairness of the marking system. The counselor tried to argue her into a better frame of mind but without much success. The next day she presumably left for home. The counselor was therefore not a little surprised to meet her on the street about three months later. She was wearing an air hostess's uniform and looked both pretty and happy. She voluntarily hailed the counselor and told him that she had been ashamed to go home, so she had registered at a training school for air hostesses. She was now working and was thrilled with her job.

This girl is an extreme case of a common type of dropout. She had no interest

in anything offered by higher education. She was not stupid, but her intellectual abilities were of too low an order for success in college without a great deal of application. She disliked studying, reading, or even thinking. She neither understood nor wanted to understand what her teachers were talking about. She had been swept along by the general exodus from her high school into college and had merely gone with her friends. Graduation from college had become for her a symbol of social success—an odd concept of the life academic. Many voluntary withdrawals are of this type. Such students do not belong in college, but it is often hard to convince them of this fact.

It is probable that there will always be withdrawals from schools and colleges. Sometimes the grounds are purely financial, sometimes the students are too dull to profit by further work, and sometimes they have no interests that could be served by the school. What is needed is a better “exit” service so that those who leave can do so without the feelings of disgrace and failure that often accompany the process. The counselor in many high schools tries to give this type of help, and in some places all pupils who want to withdraw have a series of talks with a counselor first. Some of them can—and should—be readjusted to school life, but others are definitely better off outside the school, provided the separation can be brought about without emotional trauma.

Summary

The basic fact about the high school population is that there is a great deal of it. The spectacular growth in all education above the elementary school level has, within the last fifty years, precipitated many problems—aside from such obvious ones as the mere providing of enough buildings and equipment. In 1909 a total of 20,000 college professors was enough, now 110,000 are needed, with a resulting increase in the number of those who must get a Ph.D.—hence an enlargement of the graduate school, hence a need for more professors! The number of people in the population who have a genuine inclination to teach in high school is completely inadequate for the number of positions now to be filled. The arrival of nearly 90 out of every 100 adolescents upon the high school doorstep has precipitated profound revisions in the philosophy of secondary education and in the nature of the curriculum. The statistics given in this chapter are, therefore, not just numbers in a vacuum. They summarize the basic, inescapable facts of life as far as secondary education is concerned.

References for Further Reading

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24

Emotional Problems in the Schoolroom

The present chapter will deal with four main topics: the common problems of high school pupils, mental hygiene in the classroom, the recognition of maladjustment, and the control of the class. All these topics involve emotional reactions. Even though some of the problems are themselves of physical or academic origin, the reactions that pupils make to them are emotional.

The Problems of Boys and Girls

It seems a good idea to start with a list of the problems that trouble adolescents. Many of these are at least partially solved, one way or another, during the high school years. Some of them are so troublesome that pupils cannot make much academic progress, even when they very much wish to do so. The list that will be presented in the next few pages is based upon a large number of studies that reported results from some 10,000 students in high school or the freshman year of college. The list of problems is detailed. It has been made so purposely in order that one may see the problems in as concrete a form as possible. The main divisions and the subgroupings are intended to give the list some degree of organization and to make it easier to grasp. The figures in Table 51 are percentages and are taken from several different sources. Some items were mentioned in only one study, in which case the figure comes from that one. Other items appeared in two or more reports, in such instances, the percentages from all of them have been averaged. These figures are only approximations of frequency and are included because they provide a rough estimate of how common a difficulty is among adolescents. An average student in high school will have at least a dozen of these problems, many will have thirty or forty, of which, however, only two or three are basic, the rest being pyramided on top of the fundamental ones.

As can be appreciated from the nature and number of the problems listed in Table 51, adolescence is a period of great instability. If a teacher

Table 51 PROBLEMS OF HIGH SCHOOL STUDENTS
(Figures are percentages)

I Problems of Health and Growth

Not getting enough sleep	42	Eating the wrong foods	24
Getting too tired	19	Suffering from nausea	64
Being unable to relax	27	Being too big or too small	28
Having bad posture	39	Being under- or overweight	52
Having poor figure	25	Being nervous or tense	30
Having bad complexion	31	Biting nails	26
Being awkward	22		
Sexual development	61		

II Problems of Personality

Feeling inferior	41	Worrying about little things	31
Feeling bashful	19	Being blue frequently	18
Disliking responsibility	22	Getting discouraged easily	24
Lacking self-confidence	30	Taking things too seriously	37
Feeling self-conscious	28	Daydreaming too much	32
Feeling pushed around	25	Feeling guilty about things one has or has not done	26
Feeling not wanted	21	Feeling lonesome	20
Feeling unsure of oneself	24	Feeling unhappy	16
Fearing humiliation	26	Being too easily hurt	31
Feeling stupid	33		
Having outbursts of temper	33	Being too intolerant	18
Being too restless	24	Being tactless	19
Being too excitable	23	Hurting the feelings of others	21
Being too careless	26	Arguing too much	15
Losing head in emergencies	23	Fearing criticism	20
Feeling misunderstood	19		

III Problems of Home and Family

Having no place to study	31	Quarreling with siblings	18
Having no room to oneself	18	Talking back to parents	26
Having no privacy	26	Constant bickering over money in home	15
Feeling too distant from parents in interests	19	Having parents who quarrel with each other	16
Being unable to discuss personal things with parents	29	Being treated as a child	34
Being unable to discuss sex problems with parents	30	Being denied use of family car	29
Being afraid to tell parents when one has done wrong	19	Having too little freedom	29
		Not being allowed to go out on school nights	39

Table 51—*Continued*

Being unable to think of parents as friends	28	Being made to get home at a certain hour	31
Feeling parents expect too much	28	Being regarded as irresponsible	21
Interference of parents in choice of friends	27	Not having enough spending money	26
IV Problems of Social Status			
Being awkward at social affairs	27	Not knowing how to get rid of a person one does not like	20
Fear of making social errors	43	Not having good table manners	17
Fear of meeting people	28	Not knowing how to order in a restaurant	16
Feeling unable to converse	35	Having too few friends	38
Feeling awkward in daily rela- tions with one's age-mates	17	Wanting to be more popular	54
Wanting to be in a "crowd"	18	Being left out of things	26
Worrying over what to wear	16	Wanting to join more clubs	15
Worrying over correct manners	34	Having too few activities	18
Wanting to learn to dance	34	Having no one for a chum	38
Not knowing how to act at social affairs	28	Having no one to discuss per- sonal problems with	26
Not knowing how to introduce people	29	Wanting to make new friends but not knowing how	42
Not knowing how to plan a party	16	Being unpopular	20
Not knowing how to select the right clothes	15	Wanting to be more of a leader	23
		Wanting to be elected	17
V Problems of Sex and Heterosexual Relationships			
Not having a boy (or girl) friend	35	Worrying over marrying the right person	19
Wanting more dates	45	Wondering about marriage	21
Falling in and out of love	23	Wanting to marry now	27
Not knowing how to ask a girl for a date	19	Wanting to be more attractive	38
Wondering how to get a boy to ask one for a date	15	Wanting to be more interesting to boys (or girls)	30
Not knowing what to do on a date	24	Being embarrassed by dirty jokes	21
Not knowing what is proper on a date	17	Not knowing if petting is right or necessary for popularity	21
Not knowing how to refuse a date politely	26	Thinking too much about sex	18
Not knowing if one should go on "blind" dates	22	Needing correct information about sex	35
Not knowing if one should "go steady"	26	Worrying about masturbation	29
		Worrying because organs show through clothes	31

Table 51—*Continued*

VI Problems of Religion and Morals

Needing advice on religious matters	28	Wondering what life is all about	18
Wondering about life after death	24	Trying to break a bad habit	21
Fear of death	34	Worrying over the next war	31
Being confused about beliefs	17	Worrying over racial prejudice	25
Knowing one is not living up to one's own ideals	19	Worrying over social inequalities	16
		Worrying over problems of government	15
Not knowing what is right or wrong	28	Worrying over intolerance	22
Not knowing what the standards are for right and wrong	23	Worrying over reforming	29
		Worrying over atomic warfare	49

VII Problems of School and Study

Being unable to concentrate	47	Worrying over examinations	51
Having poor methods of study	36	Worrying about low marks	28
Being unable to plan time	34	Not knowing how to prepare for examinations	26
Being inattentive in class	39	Not knowing how well one is doing	40
Being unable to use library	21	Getting too low marks	29
Being too slow	26	Disliking school	22
Daydreaming while studying	51		
Wasting time	35	Being afraid to talk in class	36
Being unable to take notes	27	Being unable to speak before a group	53
Having trouble in outlining	17		
Being unable to express oneself in speech or writing	41	Wondering if one has enough ability to do work	59
Having too small a vocabulary	26	Doubting ability to do school-work	40
Being unable to read well enough or fast enough	35	Doubting ability to go to college	42
Having teachers who are unfair	15	Fearing failure in college	27
Having teachers who are sarcastic	17	Needing help in selecting courses	26
Having teachers who give too little encouragement	15	Needing help in selecting college	38
Having teachers who have favorites	22	Having too many activities that interfere with study	32
Doubting the value of what is taught	21	Watching TV or listening to radio too much	27

VIII Problems of Choosing a Vocation

Needing help in choosing vocation	43	Having no interest in any line of work	17
Needing help in selecting necessary courses	42	Needing to earn money now	27

Table 51—Continued

Needing experience in different kinds of work	49	Needing to earn money to go to college	21
Needing help in discovering one's abilities	43	Needing to learn how to budget money	28
Needing help in learning about openings in different fields	28	Not knowing how to write a letter of application	18
Not knowing where to look for a job	35	Not knowing how to act during an interview ¹	24
Not knowing what work is suitable for one's abilities	56		

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keeps these problems in mind, she can contribute to their solution through her procedures and assignments. The main force, however, that cures an adolescent of his difficulties is more growth and more living. Often a pupil does not realize that his difficulties are not permanent. He sees no end to them, nor does he sense their relation to his stage of development. A teacher can often relieve a good deal of strain merely by telling a pupil that his troubles will soon pass.¹ She does not need to add that the present problems will be replaced by others!

Mental Hygiene in the High School

The secondary school teacher of today is responsible for teaching subject matter, just as teachers have always been, but in addition she is responsible for improving her pupils' mental health. Consequently she needs to understand the principles of mental hygiene, to be familiar with the nature of adolescent problems, and to become skilled in recognizing the symptoms of maladjustment. A high school needs also to provide the students with outlets for their emotions and to give them instruction in emotional control. These are various phases of the mental hygiene problem at the secondary school level.

¹ D P Ausubel, "Problems of Adolescent Adjustment," *Bulletin of the National Association of Secondary School Principals*, 34 1-84, 1950

Fears Caused by Schoolwork. Three fears are so common that they sometimes seem a natural and unavoidable accompaniment of schoolwork—fear of teachers, fear of examinations, and fear of talking before the class. None of these is necessary, all are destructive to either progress in school or normal personal development, and all are learned from experiences in school.

Teachers of whom pupils are afraid may have any of several unpleasant characteristics, but perhaps sarcasm and ridicule are the most common traits. Sarcasm is an unfair weapon that the sophisticated adult in a position of authority uses against pupils whose respect she cannot obtain. It usually precipitates even worse manners on the part of the student involved, and it is always emotionally disrupting. The shy students are hurt, the verbally quick students "talk back," and the ill-mannered and the hostile make scenes. In the resulting emotional storm no one in the room gets much learning done.

Fear of examinations arises when teachers stress the police functions of examinations instead of their educational functions. It may also come from too great a pressure for marks by either parents or teachers. This fear is quite real, indeed, its physical effects can be measured. Most pupils, however, recover from their apprehension as soon as they start working on a test. If the fear of examinations in the future is sufficiently intense, it prevents the learning of the subject matter, although the student conscientiously makes what should have been an adequate preparation, and it sometimes produces an actual distortion of the material. Perhaps some degree of anxiety is unavoidable, but at least teachers should do what they can to alter this attitude on the part of those pupils who show it.

Fear of talking in class is common among adolescents, especially among boys, perhaps because their voices are changing. If pupils are required to stand when talking, they may be embarrassed by their own awkwardness. Except for the occasional student who is pathologically shy, a good teacher should be able to eliminate this fear by making classwork informal and by giving special help to those who are apprehensive.

Control of the Class. Class control should be constructive. That is, it should lead the pupils to control themselves. Its objective is not quietness but the creation of an environment in which pupils can grow in both achievement and personality. The modern theories of control condemn the use of fear or intimidation in any form, and not only on humanitarian grounds. Fear leads to rigidity, not relaxation, it introduces a destructive emotion into what ought to be a constructive relationship, it prevents learning, it does not lead to a healthy attitude of mind, it favors the growth of all manner of escape mechanisms. In short, except for producing quiet, it is useless. Instead of fear, today's teacher is supposed to base her control upon

the interests of the pupils and upon their friendly feelings toward her and toward each other. She is supposed to develop such good group morale that the pupils will control each other for the most part. The latest way of describing the best form of control is to call it "permissive," "accepting," and "nondirective." A teacher is "permissive" if she has few rules and if she does not demand routinized schoolroom manners from her pupils. She is "accepting" if she lets the pupils act naturally and if she remains unruffled in the face of whatever conduct the "natural" behavior produces. She is "nondirective" if she does not tell her pupils what to do but sets before them a problem and then lets them tell her. The good modern classroom is not especially quiet, it is a hive of industry in which most of the pupils are engaged in doing something useful and in minding their own business.

The nondirective teacher controls her class by many methods, absence of rules, great flexibility of her plans, adjustment of work to the individual capacities of her pupils, absence of any considerable amount of tension plus the discharge of what little there is, transfer of the responsibility for discipline for any acts of aggression from herself to the pupils, her own efforts to give each child the stimuli he needs for healthy growth, encouragement to participation for the already-withdrawn, affection for the neglected, self-confidence for the insecure, diversion of expression for the attention seeker, and so on. As will be noted, such a teacher's efforts are directed toward avoiding situations that demand discipline. By so doing she prevents the arousal of the destructive emotions that ruin the relation between her and her pupils and make learning difficult. The strict, authoritarian, domineering teacher piles up emotional problems for herself and for her students. They become hostile toward her and perhaps, by displacement, toward all teachers and all schools.

In theory, discipline should never be necessary. The need for punishment is evidence of someone's failure—not necessarily the teacher's. However, even after a teacher has prevented all the friction she can, has made her classwork as interesting as she knows how to make it, has created a relaxed and permissive atmosphere in her room, has reduced the rules and formalities to the smallest possible number, and has led her pupils to a reasonably high level of self-control, she still finds herself faced with an occasional situation that requires punishment. For the discouragement of mere restlessness or unintentional lack of manners, nothing more than a word of restraint or reproof is generally needed when the relationship between the class and the teacher is good, but as all teachers know, in any class there are a few who are at times recalcitrant and a few who are so impertinently aggressive that their bad manners cannot be overlooked. Teachers are therefore forced into using punitive measures from time to time.

Good discipline for adolescents has certain outstanding characteristics. It is, first, the natural result of the misbehavior. For instance, if a boy loses his temper and throws an ink bottle at the wall, the natural punishment is to make him clean up the mess, not to require him to solve six extra problems in algebra after school. Second, punishment must be certain; if a mathematics teacher sometimes laughs at smart-aleck exhibitionism and sometimes punishes it, the offender is actually encouraged to continue his antics because the possible satisfaction derived from making the teacher laugh more than offsets the possibility of disapproval. Third, punishment should be just, the English teacher who gives a failing mark to a boy because, on the final examination, he split one infinitive is being so unjust as to defeat her own ends. Fourth, punishment must be impersonal, the history teacher who gets annoyed at a pupil's general inattention and assigns a penalty that springs primarily from her own exasperation will never succeed with adolescents. They know that the penalty is only an outlet for the teacher's emotions, and they blame her rather than themselves. Fifth, punishment should always be constructive and conducive to better self-control. Letting pupils suggest and carry out their own punishment is more likely to develop self-control than penalties assigned from above. Sixth, punishment should be withheld until the teacher is sure that she understands the student's motives and that she is seeing through the symptoms to the causes. Perhaps when her grasp of the situation is adequate, she will find little or nothing to punish. Seventh, punishment must avoid the arousal of fear, partly because fear is disorganizing and partly because it is useless. A frightened pupil will agree to anything, but after he has recovered, his behavior may be worse instead of better. Finally, punishment should never involve the assignment of extra schoolwork. Adolescents should have only pleasant associations with study and learning. In spite of one's best efforts they will acquire some unpleasant associations with certain elements of their schooling, but the teacher who requires a boy to translate twenty-five extra lines of French because he threw a spitball in class is doing her best to kill any interest he may ever have had in the subject. One cannot use schoolwork as a big stick on Monday and expect pupils to find it interesting and stimulating on Tuesday.

Teachers may well follow the advice given to parents to realize that most aggressive behavior stems basically from a need to be loved and to feel secure, and is preceded by a period during which the aggressor feels hurt, angry, or scared. The constructive approach is to give the offending pupil a normal amount of affection and security and to determine what hurt, angered, or frightened him. If possible, he should take an active part in the study of his motives. In the end, some punishment may yet seem desirable, but it can then be given on the basis of understanding and with the offender's cooperation.

About thirty years ago an extremely important investigation² was made into the attitudes of teachers and clinical psychologists toward common types of misbehavior, including whispering, inattention, careless work, impertinence, defiance, temper, daydreaming, overactivity, cheating, laziness, and rudeness. The total comes to 51 different forms of offense or kinds of personal traits that interfere with peace and order in the classroom. The average boy showed 10 of these reactions or characteristics, the average girl, 6. The most maladjusted children averaged 17, the chronic liars and thieves averaged 19, and the aggressive delinquents, 21. The investigator asked several teachers as well as a group of mental hygienists to rate the seriousness of each offense. The two sets of ratings almost contradicted each other, as indicated in Table 52. The correlation between the two ratings

Table 52 MISDEMEANORS IN SCHOOL

	<i>Teachers' Ratings</i>	<i>Mental Hygienists' Ratings</i>
Most serious	Immorality	Shyness
	Dishonesty	Lack of participation
	Impertinence	Oversensitiveness
	Defiance	Suspicion
	Temper	Daydreaming
	Rudeness	Imaginative lying
Least serious	Shyness	Impertinence
	Lack of participation	Defiance
	Oversensitiveness	Temper
	Suspicion	Rudeness
	Daydreaming	Whispering
	Imaginative lying	Restlessness

²Based on E. K. Wickman, *Children's Behavior and Teachers' Attitudes*, The Commonwealth Fund, 1929.

was -0.05 . It was suggested that the teachers were rating as most serious the traits and reactions that were annoying to *them* rather than those that were worst for the pupil's development. The hygienists felt that there was always hope for those who fought back, but not nearly as much for those who had already withdrawn from life. This investigation and others of more or less similar character, plus the morals to be drawn from them, have evidently had an effect. The same experiment was repeated in 1951, with a correlation between teachers and hygienists of 0.56 .³ The teachers still

²E. K. Wickman, *Children's Behavior and Teachers' Attitudes*, The Commonwealth Fund, 1929, 247 pp.

³M. H. Schrupp and C. M. Gjerde, "Teacher Growth in Attitudes toward Behavior Problems in Children," *Journal of Educational Psychology*, 44: 203-214, 1951.

tended to rate a little too high the same misdemeanors as before, but there was no longer an inverse relationship between them and experts in mental hygiene. The teachers had become less interested in maintaining order and more interested in developing normal personalities.

Instruction in Mental Hygiene The list of problems presented in a previous section might well serve as the basis for a course in mental hygiene. Many adolescents are greatly helped by the relatively impersonal and intellectual approach inherent in the study of any subject. High school students are old enough to understand the basic concepts of mental hygiene and, with help, to apply these concepts to their own lives. They have so many problems, great and small, that it is hard to imagine a more immediately useful course than one in mental hygiene. Moreover, each teacher should apply the tenets of mental hygiene to her own instruction and should use her assignments, when possible, to aid in the normal development of her pupils.

The teacher of English is in a particularly good position to provide emotional outlets and emotional stimulation through her assignments, both in writing and in reading. Creative writing gives great satisfaction to its author and often serves as an outlet for emotional problems. The form is a minor consideration, and a teacher who fusses unduly about spelling and punctuation is almost sure to diminish the therapeutic values of writing. Naturally, one has to correct errors, but the time for correction is after a pupil has expressed his interests and drives and feels that his manner of writing could be improved. One might consider the following excerpts, which are quoted as originally composed.

1 Last truthday a friend of min were have a ras. We were still ras antilt we come to a car and my frend ran me of road and hit the car the biskly trind a somer saw and I flow through the air.

2 I think I'm coming out this summer only I'm not staying on the desert. With rattle snakes crawling around my neck, and cactuses in my pants, with a black widow crawling up my leg and a teranchla biting my tow and a scorpion stinging my back. A hawk pecking my head. I hope to go to the mountain.

3 I am in the fourth grade now. I sit in the fourth row in the sixth seat from the front. On my report card I got three A and three B four S. I weigh 61 pounds. I am 52 inches tall.

4 We made a poster about dogs. We has all kinds of dogs. And they were pretty dogs. I like they all. We had a bule dog and he was looking in a mirer. And there were huting dog and some puppy too.

5 Yesterday my dad and I went riding on our horses. We went down to the field to hunt for fish in the ponds the river had left when it flooded. Once my dad looked around and I was in a mud puddle and the poney was on its side. My dad thought I was mud turtle with a cowboy hat and boots.*

*E. J. Swenson and C. G. Caldwell, "The Content of Children's Letters," *Elementary School Journal*, 49:149-159, 1948. Used by permission of the Journal.

These compositions leave much to be desired in the matter of form, but they are spontaneous and vivid. The writers of No. 1 and No. 5 had experiences that, if suppressed, might have become traumas, No. 3 is showing something of an obsession about his schoolwork, No. 2 is expressing his overdeveloped anxiety about things that crawl and bite, and No. 4 is demonstrating his interest in dogs. Such creative writing is good for children because it provides both a satisfaction of and an outlet for emotional drives.

It is the school's duty to give its students scientific information in regard to emotional life. Adolescents need it so badly they will try to get it somehow, but too often they have to depend upon quacks and pseudo psychologists for help. As matters now stand in the ordinary high school, most references to emotional problems come only incidentally into class discussions or in individual interviews with teachers. Neither arrangement is satisfactory. Instruction concerning such important matters as emotional development and control should not be left to chance.

Provisions for Emotional Outlets Another important contribution of the school to emotional stability is the provision of adequate outlets for the easily aroused emotions of adolescents. It is better for all concerned if, by providing frequent outlets, the school allows emotions to be expressed as they are generated so that a feeling which must in the interest of others be temporarily suppressed will soon be worked off. Such outlets are of various types.

Fortunately for mental hygiene, man is a talkative creature and finds it possible to work off much of his tension by merely talking. Modern school methods provide adolescents with abundant opportunities for conversation. Much work is done by committees of students, who plan their assignment, talk over what each has to contribute, and work out a joint report. These informal groupings produce relatively little tension and provide an excellent means for the draining off of destructive emotion and the expression of integrative feelings.

Since emotions generate nervous and muscular tension, anything that requires exertion acts as a relief. Games of all sorts give excellent opportunity to work off pent-up feelings generated either in or out of class. If every pupil in a high school has some agreeable form of exercise during his last period in school, or after school, he is automatically provided with an outlet of a socially accepted sort. Kicking a football is just as good as kicking a chair and much better than kicking the cat. Sheer physical exertion uses up the extra supply of blood sugar with which the muscles are already well provided and allows them to relax again. Games may also act as compensatory activities for those pupils whose academic work is poor but whose athletic skills are superior.

Any kind of extracurricular activity may also function in the same way, even though little or no physical exertion is involved. Such developments

distract the pupil's mind from his worries, provided the activities are interesting to him and he does not find them too competitive or too difficult. Then, too, they offer such opportunities for emotional expression as singing, acting, or pursuing an emotionally satisfying hobby. If a boy has a lively interest in radio, for instance, he may be able to work off, during the time he spends with the radio club, the feelings of inferiority and discouragement he has developed earlier in the day because his English composition was unsatisfactory. Or a girl may be able to express her drives for domination and prestige by making a stunning poster to support an appeal for funds on behalf of some charity. Extracurricular activities do not always function automatically as outlets for emotional stress, but they may be made to do so if they are correctly guided.

Finally, the school should provide plenty of opportunity for social intercourse in the form of purely social meetings, dances, picnics, chances for groups to lunch together, and so on. One has to remember, however, that school dances and parties can sometimes precipitate more emotional stress than they relieve if discrimination becomes involved. The high school needs no new techniques or equipment in order to provide for the working off of tensions. It needs merely to use what it has and use it wisely.

Recognition of Maladjustment In general, people seem to be somewhat inattentive to the signs of emotional disturbance, but most normal people can learn to recognize the major symptoms of maladjustment once they know what to look for. A list of those deviations which have appeared with the greatest frequency in the extensive research done in recent decades will guide teachers in the recognition of abnormal behavior, the first step in the prevention of abnormal personalities. Children regularly showing more than one or two such behavior traits as those given below are showing clear symptoms of emotional or nervous difficulty. These are the danger signals. The teacher's task is to make sure that they are not flown in vain.

Physical symptoms Frequent headaches, attacks of nausea, dizziness, loss of weight, loss of appetite, habitual twitching of muscles, grimacing, nail biting, stammering, lack of coordination, sudden blushing or paling, frequent complaints of aches and pains, obesity, mannerisms, rigidity, constant restlessness, chronic fatigue, nervousness, affectations or posturings, jumping at sudden noises, inability to stop talking.

Symptoms of emotional immaturity Dependence on teacher, frequent requests for help, efforts to attract teacher's attention, crushes on teachers, efforts to curry favor with teacher, staying voluntarily after class to talk with teacher, behavior too young for age, irresponsible behavior, impulsive behavior, mischievousness, frequent interruptions in class, inability to work alone, frequent requests for special attentions and favors, unwillingness to state an opinion, preoccupation with marks.

Symptoms of social inadequacy Excessive shyness, lack of self-confidence, preference for remaining alone, overt rejection by other pupils, lack of friends of

either sex, avoidance of members of opposite sex, absence from school parties or other events, homesickness, chronic attitude of insecurity or anxiety, unwillingness to recite, refusal to take part in games, tendency to stay alone at recess or to go home alone from school, refusal of recognitions or rewards, expectation of special privilege as a right, snobbishness, efforts to join groups where not wanted

Symptoms of abnormal emotionalism Frequent absorption in daydreaming, irrelevant answers to questions, failure to hear when spoken to, tendency to worry unduly, lack of voluntary participation in class, absent-mindedness, withdrawal from work that looks new or difficult, chronic attitude of apprehension, moodiness, overexcitability, melancholy or apathy, indifference to stimuli that excite other pupils, unusual sensitivity to annoyances, frequent laughing at nothing or failing to laugh when others do, uncontrolled laughing or giggling, high distractibility, tendency to have feelings hurt, marked fears or anxieties or obsessions, shrieking when excited, sudden attachments to people (usually older), extravagant expression of any emotion, undue and prolonged anxiety over mistakes, marked distress over failures, meticulous interest in details, frequent bad dreams, hangdog attitude of guilt or hopeless acceptance of frustration or rejection

Symptoms of exhibitionism Teasing other pupils, pushing or shoving them (especially in corridors between classes), trying to act tough, trying to be funny, wanting to be conspicuous on public occasions, effusiveness, exaggerated courtesy, marked agreement with everything the teacher says, constant bragging about exploits or places seen or people met, frequent attempts to dominate younger or smaller pupils, inability to accept criticism, constant efforts to justify self, frequent blaming of failures on accidents, on false causes, or on other individuals, refusal to admit any personal lack of knowledge or inability, frequent bluffing, attempting either far too little or far too much work, showing off

Symptoms of intellectual involvement Marked pressure of ideas that crowd forward so fast that one sentence is left unfinished as another is begun, marked slowness of answers to questions, frequent breaking off of speech in the middle of a sentence, apparent blocking of ideas, fixity of ideas, explosive tone in argument, unwillingness to change opinions in the face of evidence, seeming inability to grasp the basic ideas of a course, tendency to repeat gestures or words several times, false interpretations of other people's behavior, false accusations of others, complaints that teachers or parents "pick on" or "have it in for" one or that other pupils are antagonistic, constant negative criticism of others, frequent complaints of unfair treatment, rationalization and projection of failures, "chip-on-the-shoulder" attitude, marked suspiciousness of other people's motives, interest in schoolwork to the exclusion of everything else

Symptoms of antisocial tendencies General attitude of aggressiveness in all relations, insolence, frequent loss of temper when corrected, destructiveness of school property, defacing of books, bullying, abusive or obscene language, undue interest in sex, telling of dirty stories, writing obscenities on walls, showing pornographic pictures, fierce resentment of authority, unwillingness to conform to regulations, bad reaction to discipline, "hoodlum" behavior whenever unsupervised, irresponsibility, frequent minor delinquencies—lying, cheating, swiping things—profound

dislike for schoolwork, inability to profit from experience, truancy, delight in non-intellectual competition.

Summary

Adolescents as a group have a great many problems, and even individual boys and girls have more than a few. The school should certainly help them in solving those that are most pressing. As time goes on, teachers are becoming more and more concerned with the needs of their pupils and with the importance of the emotional atmosphere within their classrooms. They are developing a mental hygiene point of view that should contribute a good deal to the normal growth of their pupils.

References for Further Reading

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Other Texts

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25

The Social Life of the School

The social life of the school has three major manifestations—the voluntary groupings among the students, the relationships developed in the classroom, and the cocurricular activities of the school. The first of these manifestations has been discussed in an earlier chapter. The present chapter will therefore be devoted to two main topics—the social anatomy of the classroom and the cocurricular interests of high school pupils.

Social Life of the Class

Social Anatomy of the Classroom. A class is, or soon becomes, a social unit, not just a random assortment of isolated individuals. Even if the pupils are strangers at the beginning of the year, they will not remain that way for long. During the elementary school years the social life of the classroom is extremely important to a child because he spends about half his waking time in it and, perhaps, another quarter in playing with the children he works with there. In secondary school, students have several classes and several teachers. Each class has a structure of its own, since the individuals composing it are different. But no single class is likely to be as important in the adolescent's social development as the elementary school class is to the child's. However, it is desirable for a teacher in secondary school to know how to investigate social relationships by making a sociogram and to know how to use the results.

The first step consists in asking the students—usually just before the class is to be divided into small groups for some joint undertaking—to write down the names of the one, two, or three classmates with whom they would prefer to work, and also the names of the one, two, or three with whom they would prefer not to work. These acceptances and rejections are then made into a diagram of a type that will be discussed shortly.

Before considering results for an entire class, however, it seems best to demonstrate the nature and interpretation of the symbols to be used in the next few diagrams. A solid line is used to indicate preference and a broken

one to show rejection. The arrows indicate the direction of the feeling. In Figure 145 the first two children, John and May, appear to be isolates. John received no choices at all, expressed none, was rejected by five classmates, and rejected three. May made two choices and rejected no one, but she received no mention at all. Henry and Paul form a mutual pair—in this

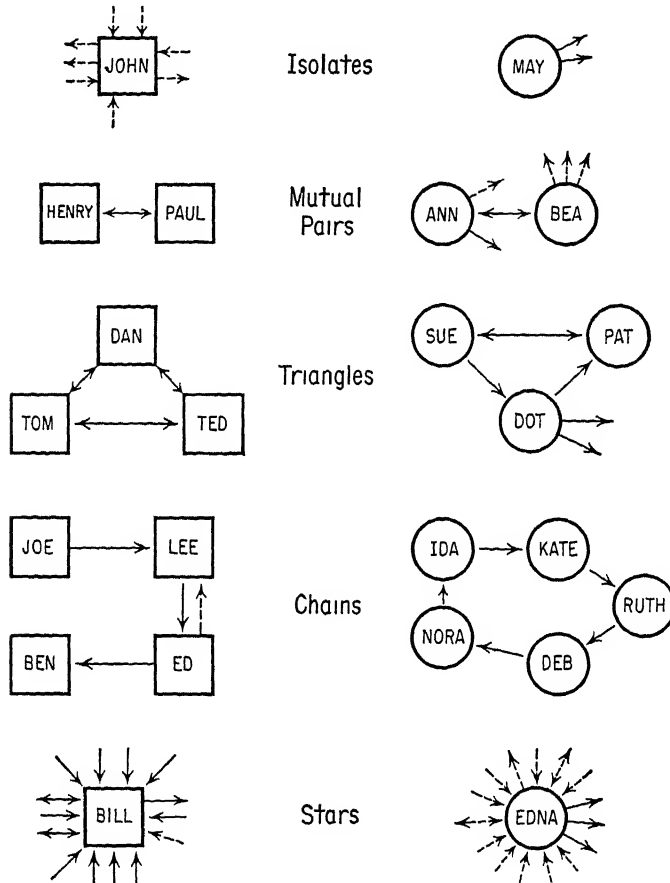


Fig 145. *Typical Results from Sociometric Studies*

case, an exclusive one, since neither boy expressed a liking for anyone else. Ann and Bea are not quite so close, because Ann made one other selection. Dan, Ted, and Tom, or Dot, Pat, and Sue form triangles of attraction—in the case of the boys, a closed triangle. That of the girls is less exclusive since there is only one mutual attraction instead of three, moreover, Dot has attachments outside the triangle. The boys' chain, in which Joe likes

Lee who likes Ed who likes Ben, is an open one, because there is no relation between Ben and Joe, while that of the girls is closed. The boys' chain is interrupted by one rejection. Bill and Edna are "stars," one positive and one negative. Bill was selected by twelve other boys, two of whom he selected in return. Edna was rejected by eleven others, of whom she rejected two, in addition, she rejected one other girl and expressed preference for three more.

To make a sociogram one records all the choices and rejections in either a single chart or in two charts—one for positive and one for negative reactions. The separation is merely in the interests of clarity. The only guiding principle in arranging the names on the chart is to avoid as many crossing lines as possible. Boys are represented by squares or triangles, and girls by circles. The name of each child in the group appears inside one of these symbols. The maker of the diagram next draws an unbroken line, terminating in an arrowhead, from the square or circle to that of each of the child's choices. For aversions, one uses a broken line. If either feeling is mutual, there is an arrowhead on both ends of the line. When the diagram is completed, one is almost sure to find certain arrangements and groupings.

Use of Sociograms. As examples of the uses to which sociograms may be put the results of three investigations will be reported. The first illustrates the practical value of a sociogram in arranging committees within a class, the second shows the interrelational changes in an entire group when the teacher used her sociogram to guide her in her work, and the third demonstrates the changes in individual children.

The sociogram in Figure 146 on page 596 shows the attractions and repulsions among the seventeen boys and fifteen girls in a high school English class. Each pupil was asked to indicate the two other pupils with whom he would prefer to work on the preparation of a joint report and the two with whom he would least like to work. For purposes of simplification, the attractions are recorded on the left half of the diagram and the rejections on the right.

Among these seventeen boys and fifteen girls there was one small clique, composed of five boys (Numbers 4, 6, 10, 11, and 12), plus the suggestion of another among girls (Numbers 7, 8, 9, 10, 11, and 12). There are also four pairs of mutual friends among the boys, three pairs among the girls, and one pair composed of a boy and a girl. Pair 14-15 among the girls has no voluntary contacts with other members of the class. The pair composed of Boys 1-2 is nearly as isolated. The other pairs have some contacts beyond each other. There are also two chains (Boys 8, 9 and Girls 5, 1, Girls 1, 8, 9, 10, 12, 7, and 5). The stars are Girl 7 and Boy 10. There are five isolates (Boys 5, 7, 13, and Girls 2 and 13), they made choices, but no one chose them. Boy 1 chose only his chum, while Boy 10 was unable to choose two from his three intimates and so selected all of them. There are eight choices of

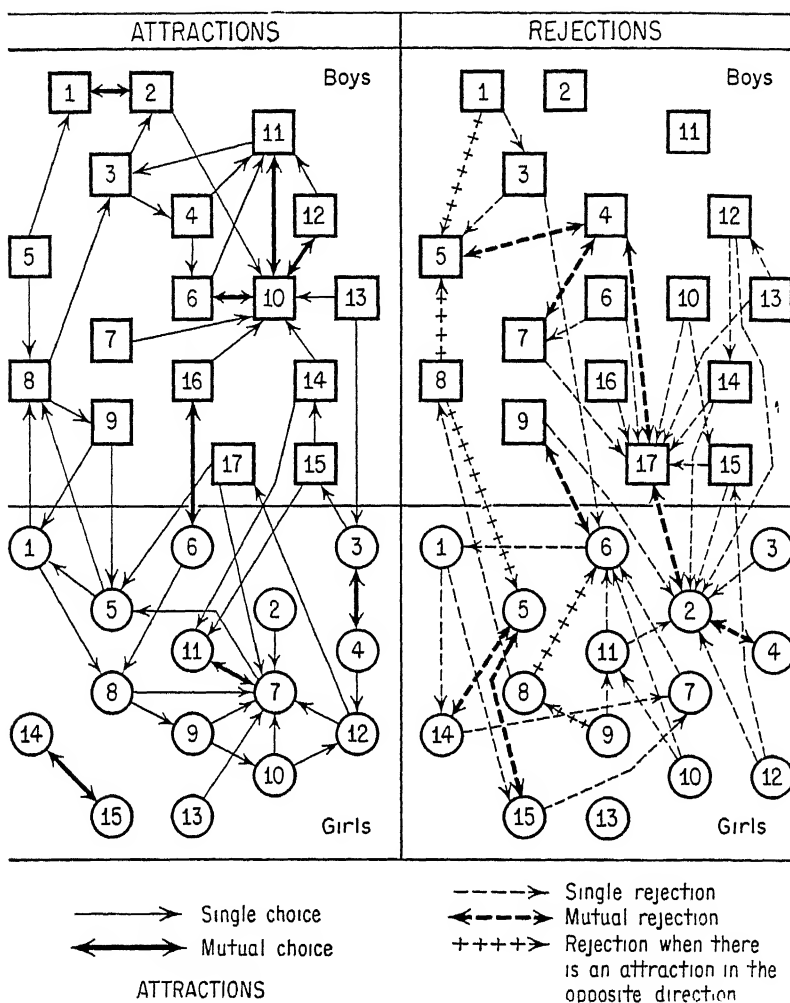


Fig 146 *Attractions and Repulsions in a High School English Class*

girls by boys and five of boys by girls. Boys 9 and 17 chose only girls. Boy 5, an isolate, is trying to attach himself to both a mutual pair and a chain. Boy 7 chose the most popular boy, and Girl 13 chose the most popular girl. This selection of central figures by rank outsiders is a common phenomenon.

One boy, Number 17, and two girls, Numbers 2 and 6, are the main centers of admitted hostility. In five instances a choice in one direction is met with repulsion in the other (Boys 1-5, Boys 8-5, Girls 8-9, Girls 8-6, and Boy 8-Girl 5). There were eight mutual rejections (Boys 4-5, Boys 4-7, Boys 4-17, Girls 2-4, Girls 5-14, Girls 5-15, Boy 17-Girl 2, Boy 9-Girl 6). The chums, Girls 14, 15, selected only each other, ignored boys, rejected the same two girls, were rejected jointly by two

girls, and were jointly ignored by everyone else. Eight boys rejected girls, and four girls rejected boys. Boys 2 and 11 rejected no one, if they could not work with their chums or with the most popular boy they did not care with whom they worked. Girl 13 also rejected no one. Boys 5, 16, and Girls 3, 4, 7 made only one rejection each, while Boy 4 made three. Boys 1, 2, 6, 10, 11, 13, and 16 and Girls 3, 9, 10, 12, and 13 received no rejections.

In order to try out the effect of these various interrelationships upon the work of small groups, one of the writers persuaded the teacher of this class to divide it into (A) one good group, (B) one that was composed of small cliques, (C) one that contained many antagonisms, and (D) one in

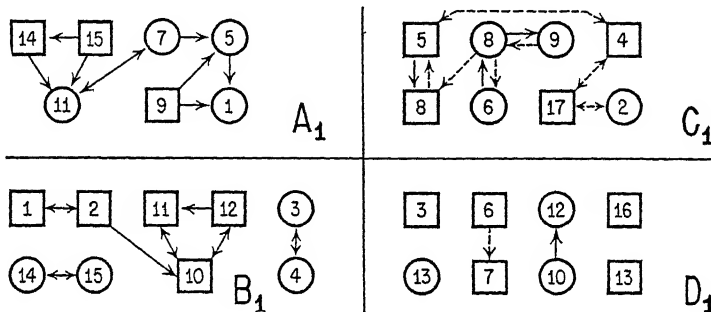


Fig 147: *First Arrangement of Class into Committees*

which the members had relatively few contacts with each other. The interrelationships are shown in Figure 147. The groups were given a list of a dozen topics, any one of which they might choose to work on, their first task being to select their subject. So far as the academic result was concerned Groups A and B turned in good reports, that from Group C was poor, while Group D never finished any joint report, although most of the members put in individual ones of varying merit. Girl 11 became the leader of Group A from the start. For a few days, Boy 10 tried through his general popularity to whip the cliques in Group B into line, but not without a good deal of resistance. Whenever he stopped prodding, the group fell to pieces. In the end, he broke the work up into units and assigned one unit to each clique—thus showing that his popularity rested upon the foundation of an insight into social behavior. Group C was full of discord and argument, as might have been expected, since there were three mutual rejections and three cases in which a liking in one direction was met by a dislike in the other. There was no leader, and twice the teacher had to intervene to keep the peace. If anything, the antagonisms among the members were deeper at the end of their joint effort than at the beginning. Group D discussed the selection of a topic in a listless and desultory way for nearly two weeks but

never came to an agreement. In the end the group simply disintegrated, a few members wrote individual reports.

For the next assignment, the teacher rearranged the students to the best possible advantage, as shown in Figure 148. She put one student with some qualities of leadership into each group, broke up most of the cliques, and distributed the isolated and disliked pupils so that there were no more than two in each group. They were soon drawn into at least a slight degree of activity by their more socialized mates and by their leader. Aside from the isolates, positive bonds held the members of each committee together. All four groups worked through several projects in harmony and with

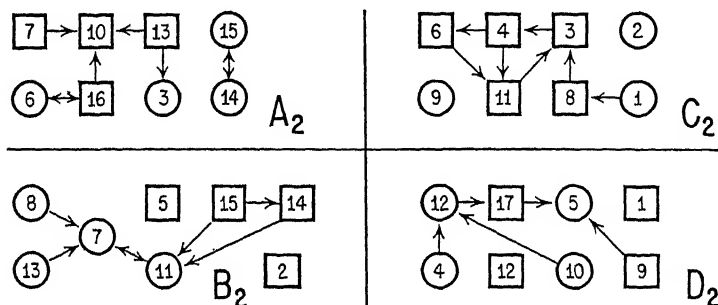


Fig 148 Second Arrangement of Class into Committees

excellent results academically. It should be noted that in this second series of committees there is not a single expressed antagonism to interfere with the progress of the work in hand.

Two years ago one of the writers had a friend who was teaching remedial reading to small groups of high school freshmen. In the fall of 1955 she had one group of sixteen adolescents, composed of nine white pupils, two Negroes, four Chinese (recently arrived in this country), and one Japanese. Early in the semester she made a sociogram of this group. Although she asked the pupils to select two or three others with whom they would like to work, eight of the group selected only one, three selected two, and only four had three positive choices. In only one case did any member choose another not of the same race, and this choice was not mutual. The sociogram, reproduced in Figure 149, showed that this teacher had in her class one clique of four boys (1, 2, 3, and 4), one mutual pair (5 and 6), and three isolates among the white children (7, 8, 16). The two Negroes chose only each other, and four Chinese made only one choice outside their own nationality. The Japanese girl chose one white student and one Chinese, but neither choice was reciprocated. On the basis of this information, the teacher made two decisions: to have the students work in pairs

that would be changed every two weeks, and to have the reading matter consist of stories about children and adolescents of many lands. Her first arrangement of the pupils was as follows.

Boy 1—Boy 10, N
 Girl 6—Girl 9, J
 Girl 5—Boy 15, C
 Boy 3—Girl 13, C

Boy 8—Boy 7
 Boy 2—Boy 12, C
 Boy 4—Boy 14, C
 Girl 16—Girl 11, N

Seven of the eight pairs had one white pupil and one from some other race, the remaining pair consisted of two white isolates. Every two weeks the second member of each pair moved on, with the result that almost everyone in the class worked sooner or later with almost everyone else.

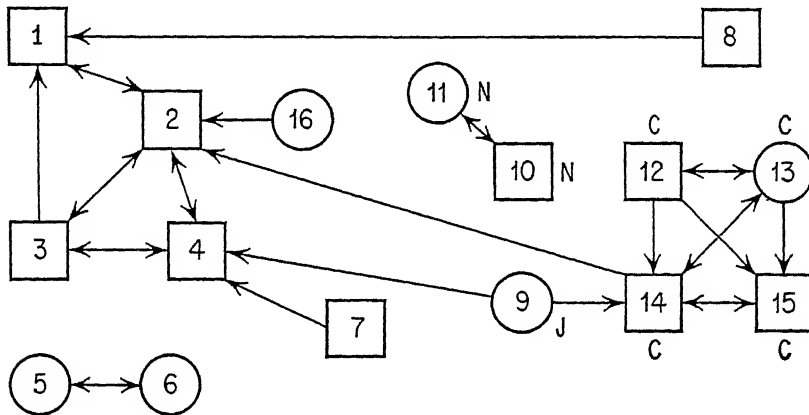
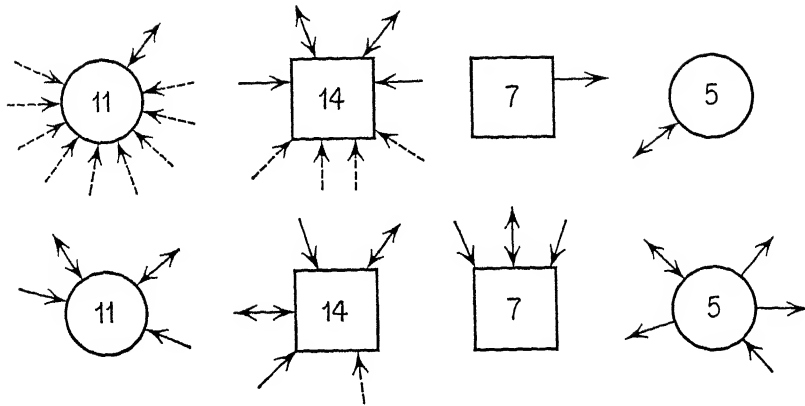


Fig. 149. *Choices in One Small Class*

The half of the sociogram that showed the rejection is not reproduced *in toto* because it is too complex. It is, however, worth while to pick out a few individuals and show both their original standing and their degree of acceptance and rejection at the end of the semester. Results for four pupils are shown in Figure 150. Girl 11 began with one mutual choice and nine rejections, she ended with two mutual choices, two additional choices, and no rejections. Boy 14 began with two mutual choices with other pupils of his own nationality, two other choices and four rejections. He ended with one mutual choice with another Chinese, one with a white boy, two additional choices, and one rejection. Boy 7 made one unreturned choice at the beginning of the semester, but received no attention from anyone. At the end he had one chum and two other votes. Girl 5 started with one mutual choice, at the end of the semester she voted for one white boy, one

Fig 150 *Before and After*

Chinese boy, and the Negro girl, she retained her chum and received one other vote

The total number of choices and rejections reflects the successful handling of this extremely difficult group. The change is summarized below

	<i>Initial Results</i>	<i>End Results</i>
Mutual choices	9	12
Single choices	9	32
Mutual rejections	6	1
Single rejections	29	8

Of the nine rejections at the end of the term, only two were between members of different races. This teacher taught a good deal more than reading.

It is to everyone's advantage that the social interrelations within a class be used as much as possible, if only for purposes of getting the work done better, since harmony produces better results than strife. Moreover, if the rejected pupils lose some of the antagonism directed against them, they have less need for hostile, aggressive defense reactions. The isolates and neglected ones begin to establish contact with the world. Even if they learned no more, and they often do, such results in character development would make the procedures worth while. The intelligent use of a sociogram thus permits a teacher to work with adolescent society instead of against it, as she is likely to do if she ignores the social behavior of her students.

Relation of Teacher to Class

Some of the relatively recent studies of the relation of teachers to their classes have consisted of obtaining a verbatim report of what went on

in class during a given unit of time on several occasions, and of then analyzing this record. In many cases, however, the observation of experts was the main method of investigation. Sometimes the teachers knew they were being observed, and sometimes they did not. Naturally, no two records of a teacher's behavior, either by different observers on the same day or by analysis of verbatim records on different days, show perfect agreement. Wholly aside from any variability in the observers, the teacher does not proceed in exactly the same manner every day, because of differences in subject matter, if for no other reason. Since she is influenced by human stresses and strains, she herself changes more or less. The earlier reports of reliability of either verbatim recordings or expert judgment gave correlations from 0.74 to 0.93 between raters or observers. Probably these coefficients were high because only well-trained judges attempted to make the estimates. More recent reports have been much less encouraging.¹ The first such effort at judgment is said to be worthless—although why anyone should expect it to be anything else is a mystery. In the day when the elder writer learned to give the Binet Examination, the rule was to give 50 Binets for practice and throw them all away before even expecting that the results one obtained would be worth keeping. Not only is a first observation of no value, the writers would guess that at least twenty should be made under guidance and another eight or ten independently before one should expect his results to have a reasonable reliability. If the judges are experienced, their reports should be of sufficient reliability to be worth paying attention to, and until they are trained, the only proper place for their reports is the wastebasket.

The studies to be discussed in this section are among the earlier ones, because these were made by observers of experience, not by amateurs. An examination of these materials leaves one with the conviction that good observers and good analysts of records really do agree with each other well enough to command respect for their findings.

Three studies seem to be of special interest to the prospective teacher. Two are concerned with the teacher's spoken comments and questions, and the third with the classification of a teacher's contacts, both group and individual, with her class, and with the effects of her contacts upon the behavior of the pupils.

The figures in Table 53 summarize results from the first study to be reported.² The six teachers involved differed widely from each other in the intent behind their contributions to class guidance or discussion. One teacher (C) spent only 42 per cent of her time in making constructive sug-

¹ E. Wandt and L. Ostreicher, "Validity of Samples of Classroom Behavior for Measurement of Social-Emotional Climate," *Psychological Monographs*, Vol. LXVIII, no. 376, 1954, 12 pp.

² H. H. Anderson and J. E. Brewer, "Studies of Teachers' Classroom Personalities I," *Applied Psychology Monographs*, no. 6, 1945, 157 pp.

Table 53 CLASSIFICATION OF THE SPOKEN COMMENTS OF TEACHERS^a

	<i>Teachers</i>					<i>Three Ratings of Teacher F</i>		
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>1</i>	<i>2</i>	<i>3</i>
1 Statements reassuring or commending pupil	18	20	8	2	2	0	8	0
2 Statements conveying to the pupil the feeling that he was understood and to help him elucidate his ideas	5	8	3	0	5	69	58	64
3. Statements or questions proffering information or raising queries about the problem in an objective manner, with the intent of facilitating the solving of the problem	29	40	31	53	70	16	21	22
<i>Constructive comments</i>	<i>52</i>	<i>68</i>	<i>42</i>	<i>55</i>	<i>77</i>	<i>85</i>	<i>87</i>	<i>86</i>
4. Remarks consisting of polite forms, names of pupils, conveyance of brief administrative items, verbatim repetition of something already said								
<i>Neutral comments</i>	<i>10</i>	<i>22</i>	<i>20</i>	<i>21</i>	<i>9</i>	<i>15</i>	<i>11</i>	<i>0^b</i>
5 Statements exhorting or directing the pupil to follow a recommended course of action	15	7	24	14	6	0	0	2
6 Statements reproving the pupil for undesirable action or deterring him from unacceptable future behavior	9	2	9	7	0	0	2	6
7 Statements justifying teacher's own position or course of action	14	1	5	3	8	0	0	6
<i>Destructive comments</i>	<i>38</i>	<i>10</i>	<i>38</i>	<i>24</i>	<i>14</i>	<i>0</i>	<i>2</i>	<i>14</i>

^a Figures express percentage of time spent by teachers in various types of contact with their pupils.

^b This result seems most unlikely, though it is possible that a teacher might not call any pupil by name or say "Thank you" or "Would you please continue" during a period of observation. Since the figures are combined to the nearest whole number, a teacher may have used some per cent less than 0.5 in neutral remarks.

From J. Whithall, "The Development of a Technique for the Measurement of Social-Emotional Climate in the Classroom," *Journal of Experimental Education*, 17:347-361, 1949. Used by permission of the publisher.

gestions. She used up 20 per cent of her time in making announcements, in giving directions, or in merely repeating what a pupil had said, presumably while she communed with herself as to what might next be done. She used the remaining 38 per cent of her time in dominative or destructive contacts with the pupils. Teacher F, on three separate occasions, used 85, 87,

and 86 per cent of her time constructively. Her need for neutral comments varied greatly, probably according to the subject matter and the practical needs of the moment. For example, such an occurrence as a special assembly, a bank day, a prospective fire drill, or an excursion will require more than the customary number of merely informative remarks. Her need to reprove members of the class was infrequent, and during two observation periods she neither gave orders nor spent time justifying herself.

A second study of teachers' remarks and questions is of a more restricted character and concerns the nature of verbal contacts between thirty student teachers and the pupils in their classes. These "teachers" were naturally inexperienced, but they were constantly under observation and could therefore be studied intensively. The comments were classified as "positive verbalism" (the direction of an individual pupil's attention to a desired act or attitude), "negative verbalism" (the direction of a pupil away from undesired behavior), and "blanket responses" (remarks directed at the entire class, such as, "Come now, let's all of us start working"). These verbal offerings were correlated with ratings of the teachers' general effectiveness. Two types of verbal comment showed relationship to the ratings. Positive verbalism correlated $+0.59$ with the ratings, while the issuing of "blanket" instructions correlated -0.62 . The student teachers received marks in practice teaching at the end of the course. Four students received the highest and two the lowest grades given. These extreme cases show the trends better than the entire group does. The comparison appears in Table 54. The

- 3 Dominative, with evidence of working together
- 4 Integrative, with no evidence of working together
- 5 Integrative, with evidence of working together

The members of one pair of teachers were conspicuously different in their behavior. Teacher A was of the authoritarian type. She used domination of class and pupils as her main technique. Most of her contacts consisted either in giving directions or in making explanations. Her dominating procedures resulted in conflict, both with single pupils and with the class as a whole. When she did make integrative reactions, she worked against the children three times as frequently as with them. Teacher B created a democratic atmosphere in her room. She had relatively little conflict with her pupils, and her contacts were usually integrative. She used eight times as many contacts classified under Number 5 above as Teacher A did. Teacher B's pupils showed a significant excess of the types of behavior classified by observers as being spontaneous, showing initiative, leading to problem solving or to co-operative efforts with other pupils, and a significant lack of behavior classified as attempts to domineer over other children or as nervous habits.

It is interesting to note that teachers in the same school tend to resemble each other, either because they were originally selected by the principal as embodiments of what he or she thought teachers should be, or because the yearly newcomers to the group gradually conformed to the norm. Thus all teachers in one school equaled or exceeded all teachers in another in the excess of their integrative over their dominative reactions.

The authoritarian type of teacher is no longer admired. Her domineering procedures break up or repress natural groupings among the students and result in frequent conflict between herself and them. The students often develop similar attitudes towards each other, and they become overdependent upon authority. Since adolescents are going to work together anyway, they will form a resistive unit to the domineering teacher. Such a teacher may achieve good academic results but at the cost of injury, temporary or permanent, to the development of those in her charge and of no little injury to herself, because of the heavy strain under which she works. The acceptable teacher of today has very different objectives, although she also is interested in the mastery of subject matter. She tries, first of all, to know the children and to provide for individual differences among them. She wants to induce as much natural growth—physical, social, and emotional—as she can. She gives information, arranges the work so that the pupils can inform themselves, and she expects to do a good deal of counseling. She studies the relationships within her class, and she tries to weld the members together into a working, living unit. Finally, she is a vital cog in the machinery of putting pupils who need expert attention of any

kind in touch with the person who can best help them ⁴ In the eyes of her pupils she is a friend, not a despot Naturally, not all teachers can attain this ideal, but at least the modern teacher tries to do so

The Cocurricular Program

The social activities sponsored by the high school take the form of the "extracurricular" or, to use a more appropriate name, the "cocurricular" program Although the activities should always be based upon the spontaneous interests of adolescent boys and girls, they are nevertheless to some extent organized and supervised by the school Because of the intense social interests of most adolescents, these cocurricular activities constitute an important part of school life

Nature and Types of Activity Theoretically, the cocurricular program should include opportunities for students to develop their interest and skill along any line, whether or not it is already adequately provided for in the program of classes Actually, however, the expansion of activities is always conditioned by the size and facilities of any particular school Unless it owns a printing press, a school cannot, for instance, have a club in which pupils actually print their own stories There is a limit also to the number of clubs a member of the faculty can supervise and the number a pupil can profitably belong to

In order to demonstrate the wide variety of adolescent interests and enthusiasms, a summary is given below of the types of organization that are sponsored in junior and senior high schools, although not all of them appear in any one school.

I Organizations concerned with school government

- 1 Student government, student council
- 2 Student court
- 3 Homeroom organization
- 4 Class organization
- 5 Assembly program committees

II Organizations based on service to school or community

- 1 Know-your-city club
- 2 Improve-your-city club, neighborhood club
- 3 School newspapers, handbook, magazine
- 4 School police
- 5 Army, Navy, Marine, and Air Force clubs, women's corps
- 6 Patriotic clubs
- 7 Defense club

⁴ Based on L N Recktenwald, "Effective Interpersonal Relations in the Classroom," *Education*, 75 13-17, 1954

III Organizations growing out of academic classwork

- 1 Language clubs
- 2 Writing clubs
- 3 Debating clubs
- 4 Mathematics clubs, surveying clubs
- 5 Naturalist, Audubon, or Agassiz clubs
- 6 Astronomy, geology, geography, chemistry, physics clubs
- 7 History, current events, biography clubs
- 8 Civics, sociology clubs
9. Honor societies. Phi Beta Sigma, Cum Laude Society, Ephebian Society, National Honor Society, etc

IV Organizations based on commercial or home economics classwork

1. Business correspondence clubs
- 2 Stenographic and typing clubs
- 3 Office practice clubs
- 4 Market clubs
- 5 Banking clubs
- 6 Homemaking clubs embroidery, knitting, crocheting, serving, millinery
- 7 Fashion clubs
- 8 Home nursing clubs
- 9 Gardening clubs
- 10 Cooking clubs canning, freezing clubs
- 11 Textile, basketry clubs

V. Organizations based on classwork in mechanical arts and applied science

- 1 Mechanical drawing, blueprinting, printing clubs
- 2 Carpentry, cabinetmaking, woodcarving clubs
- 3 Forging, metalworking, jewelry-making clubs
- 4 Model-making clubs airplanes, sailboats, speed boats, automobiles
- 5 Radio, television clubs, radio building or repair club
- 6 Leatherwork club
- 7 "Space" club

VI Organizations based on social needs and interests

- 1 Dance clubs, school dances
- 2 Bridge clubs
- 3 Fraternities and sororities
- 4 Etiquette clubs
- 5 Leaders' clubs

VII Organizations based on aesthetic needs and interests

1. Music orchestra, bands, glee clubs, school chorus, musical appreciation, radio, phonograph clubs
- 2 Drawing and painting sketching, camera, cartoons, posters, art collecting, art appreciation, designing
- 3 Dancing aesthetic, folk, social

VIII Organizations based on religious or moral needs and interests

- 1 Girl Reserves, Hi-Y Clubs, Junior YWCA or YMCA, 4-H Clubs, Boy and Girl Scouts, Camp Fire Girls, Junior Red Cross, hospital auxiliary
- 2 Church clubs
- 3 Chapel services, assemblies (if of religious nature)

IX Organizations based on athletic needs and interests

- 1 School teams baseball, basketball, football, tennis, hockey, swimming, skating, track, gymnasium, etc.
- 2 Class teams of same types
- 3 Hiking or camping clubs
- 4 Intramural clubs

The first type of activity to be discussed here is the organization for governmental purposes of the homeroom, the student council, and the assembly. Through these activities the pupils practice techniques of government and participate in the conduct of school affairs. They learn how voting is done, how laws are formulated and passed, how a court functions, how rules are enforced. These activities give practical training in citizenship. The more the students take part in their own government the better, but there are obvious limitations to their participation. In the first place, there are several matters that are not at all their business, for instance, the repair of buildings, the employment of teachers, and—in considerable measure—the curriculum. The main objective of student government is the education of pupils through the control of behavior in the school, the punishment of the violators of the students' own regulations, and the management of small units of government—such as the homeroom or any of the clubs developed by the school. These responsibilities usually appeal to adolescents because they feel themselves old enough to determine rules for their own behavior.

The range of topics included in the list above suggests the catholicity of adolescent interest. Although some of these clubs are obviously related to the curricular work of various departments in the high school, they do not have the same objectives or values as the courses from which many undoubtedly developed. Students may use their activities for purposes of exploring various untried fields, for the development of avocations and of profitable and interesting uses of leisure time, as opportunities to develop normal social relationships with each other, for practice in self-direction and self-government, and as outlets for their emotional drives.

Athletic activities form a class by themselves. In the past they have shown a tendency to overshadow other elements in the nonacademic program of the high school. The social prestige and general publicity given the high school athlete have combined to produce disagreeable reactions in many boys who were normal until their period of athletic prominence.

Intense competition in high school athletics has led to the development of a few experts rather than to the rounded physical development of every pupil in the school. In recent years more and more people have realized that high school athletics might well have a damaging effect upon morale and might prevent rather than promote the development of good sportsmanship. To combat this tendency the intramural athletic program has been developed with great success in some schools.

As a means of physical development and as a preparation for leisure time, it seems desirable that every adolescent should learn to play reasonably well at least one game for which the equipment is not expensive and the demands on vitality are not excessive. This provision immediately rules out football, basketball, hockey, and baseball because the equipment is too expensive, the risk of injury too great, and the drain on energy too severe. Tennis, golf, softball, swimming, skating, or fencing, on the other hand, may be continued for many years after adolescence. So also may such minor games as badminton, handball, table tennis, or volleyball. As training for adult use of leisure, the less vigorous and less highly organized games and sports are to be recommended, but the time to learn them is during childhood and adolescence.

Most of the activities listed above are definitely wholesome and valuable, but the high school fraternity and sorority are generally condemned. They have all the faults of the college brand and practically none of the virtues. Membership in them comes at just the time when boys and girls have the strongest drives to slavish imitation of each other, the least degree of social independence, the most sensitive feelings, and the highest degree of uncertainty about their general acceptability. Members are influenced to become more snobbish than is normal, and nonmembers develop increased feelings of rejection. The difference between the privileged few and the undervalued many is nowhere sharper than in a school divided into members of secret societies and everyone else.

Distribution of Cocurricular Activities. If adolescents are left to themselves, the activities will almost certainly be dominated by the best adjusted students in the school. The pupil who tends to participate voluntarily and successfully is usually a little more intelligent and more mature than the nonparticipant, he comes more frequently from the upper socio-economical levels, his personality is better organized, and he has wider interests than the average. These statements are based upon a study of 115 adolescents who were mentioned in their school newspapers as compared with those whose names never appeared.⁵ They are the "natural" leaders, and they tend to overparticipate, probably because they have the necessary traits and social position and because they derive satisfaction of their social

⁵ M. C. Jones and H. E. Jones, "Factors Associated with Prominence in Extra-Curricular Activities at the High School Level," *American Psychologist*, 4 251, 1949.

drives by such activities. By contrast, the shy, self-conscious, or repressed pupils who most need cocurricular activities for their own best development are likely to have the least opportunity for the participation that would give them the experience they need in order to gain social poise and social skills.

It is not necessary for pupils who do not spontaneously participate in activities to remain aloof throughout their adolescent years. Those who are shy, easily embarrassed, and withdrawn can be helped to a better adjustment and eventually to some degree of participation in the social life of the school.⁶ Counseling that is directed specifically toward helping students appreciate the value of cocurricular activities yields results. It is not a matter of requiring participation but of readjusting isolated pupils so that they have a desire to join in the activities going on about them.

In many schools the administration has tried to regulate participation by a point system or other method. This technique, if used alone, has been rather ineffective for two reasons. In the first place, the number of points, indicating the number of positions a pupil may hold simultaneously, is generally too high. Second, those pupils who love to expand their egos by participation in nonacademic activities often resort to the following trick: they use up their own points and then get their friends elected to other positions that they covet, whereupon they shelve the obliging friends and do the work themselves. Some better method than those usually employed is needed for distributing participation in terms of needs as well as in terms of interest.

There are very few studies that relate the participation in extra-curricular activities to the needs of the students. What evidence there is suggests that those who most need the socializing experience of these activities have the least chance to take part in them, and that those who need them least get the lion's share. For instance, in one city high school, 30 per cent of the students belonged to a sorority or fraternity, there were, then, 70 per cent outside this form of participation altogether. But the situation was even more one-sided, because of those who belonged, 92 per cent came from the highest economic and social groups in the city and presumably had ample opportunity at home for social pursuits. Even the Hi-Y Club drew 74 per cent of its membership from this same "upper crust." Further evidence from the same school brings out other points of interest, which are summarized in Figure 151. The curve at the left shows the relation of social status to participation. Those with no activities came from the lower social groups, and those with three or more from the

⁶ See J. C. Solomon and P. L. Axelrod, "Group Psychotherapy for Withdrawn Adolescents," *American Journal of the Diseases of Children*, 68:86-101, 1944, or P. L. Axelrod, M. S. Cameron, and J. C. Solomon, "An Experiment in Group Therapy with Shy Adolescent Girls," *American Journal of Orthopsychiatry*, 14:616-627, 1944.

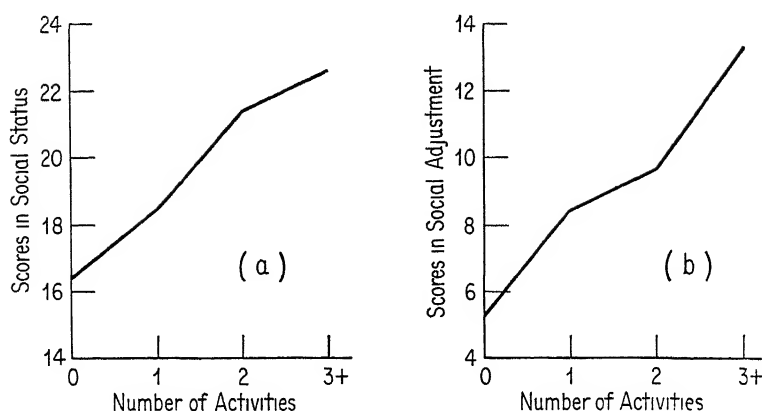


Fig 151 *Relation between Participation in Extracurricular Activities and (a) Social Status and (b) Social Adjustment*

Based on H P Smith, "The Relationship between Scores on the Bell Adjustment Inventory and Participation in Extracurricular Activities," *Journal of Educational Psychology*, 38 11-16, 1947. The scores in (b) have been subtracted from a constant, to make the curve go in the same direction as that in (a).

highest. The curve at the right shows the relation between personal adjustment and participation. Again, the participation is in inverse proportion to the presumed need.

As an example of development in extracurricular activities within a single school, some statistics will be presented from a private school that has a complete set of yearbooks running back for nearly 100 years. The earlier ones sometimes mentioned the various clubs and sometimes gave the names of the officers—but not the names of the members of each club—and sometimes they reported nothing about extracurricular activities. The earliest yearbook to include all the facts needed for the present investigation was published in 1881. In this year there were 73 girls in the school and sixteen clubs, with a total membership of 189. The sixteen clubs were titled as follows: orchestra, choir, singing (for any girl who liked to sing without test of her ability to do so), drawing, painting, athletics, gymnasium, canoeing, literature, French, Latin, Greek, Christian Association, Bible, cooking, and drama. Each club had four officers, giving a total of sixteen presidencies and forty-eight other offices. The record of the nine girls with the greatest degree of participation is listed below:

1 girl had	9 memberships	2 presidencies	3 other offices
1 girl had	8 memberships	3 presidencies	1 other office
1 girl had	8 memberships	1 presidency	6 other offices
1 girl had	7 memberships	2 presidencies	2 other offices
1 girl had	7 memberships	2 presidencies	4 other offices
1 girl had	6 memberships	3 presidencies	2 other offices
1 girl had	6 memberships	1 presidency	3 other offices
1 girl had	6 memberships	1 presidency	5 other offices
1 girl had	6 memberships	1 presidency	4 other offices
	<hr/> 63	<hr/> 16	<hr/> 30

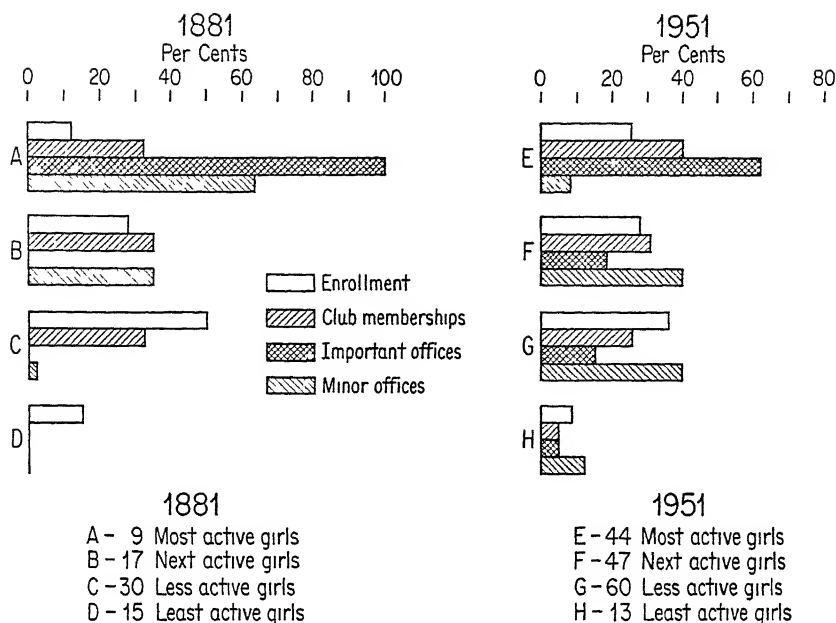


Fig 152 *Development of Activities in a Girls' School, 1881-1951*

At this time the clubs were relatively unsupervised, and each girl joined as many as she wanted to. It will be noted at once that these 9 girls averaged 7 clubs each, held all the presidencies and 63 per cent of the other offices. Of the 73 girls in the school, 46 (63 per cent) had no office of any kind, and 15 per cent belonged to no club. The situation is pictured in the upper bars of Figure 152.

In 1951 the same school enrolled 164 girls. All of them belonged to Student Government, all but 4 to the Christian Association, all but 7 to the Dramatic Association, and all but 3 to the Athletic Association. The 14 nonmemberships in this school group represented only 9 girls, of whom 5 abstained from two organizations. In addition, there were 42 clubs, a student court with 5 judges, a yearbook committee (with 1 chairman and 7 members), and 3 dormitory committees, totaling 3 chairmen and 6 other members. The 42 clubs were as follows:

Orchestra, choir, singing, glee, opera, radio, and record clubs
sketching, art appreciation, painting, and architecture clubs
leather working, woodcarving, and jewelry clubs
gymnasium, games, swimming, skating, and rowing and canoeing clubs
literature, French, German, Italian and Spanish, and classical clubs
ancient history, European history, and current events clubs
Bible and philosophy clubs
biology, physics and chemistry, and mathematics clubs
child care, home economics, and family living clubs
drama production and puppet clubs
social dancing and folk dancing clubs
writing and newspaper clubs

There were 42 presidencies of clubs, 4 presidencies of the four large school organizations, 5 student judges, 4 chairmen of committees, and 4 presidencies of the school classes, making up a total of 59 major offices. The clubs each had one other officer (42 secretary-treasurers), the four large organizations had each 3 other officers (4 vice-presidents, 4 secretaries, and 4 treasurers), the committees had 13 members besides the chairmen, and each class had a secretary-treasurer, giving a total of 71 minor offices. The student government had passed rules several years earlier limiting membership to 4 clubs or committees in addition to the 4 large organizations to which practically everyone in the school belonged, and requiring membership by each student in at least 1 club. There was also a recognized principle that every student should hold at least one office every year, and the secretary of student government was charged with the responsibility of keeping a list of the students, rejecting the names for any proposed offices in excess of the number allowed and suggesting names of students who had held no office as substitutes for those who had reached their limit. Membership on the various school athletic teams was also counted on a student's record. There were therefore enough offices of some sort to go around for all, and the few girls who were inclined to be overactive were prevented from having more positions than they should.

In 1951 the important positions were still held by the more active girls, but this situation is to be expected, since shy isolates are not likely to be elected to a major office—and would probably go into a panic from fright if they were. However, there has been an enormous gain since 1881. Essentially everyone belongs to four groups, and the memberships in clubs are much better distributed. One cannot hope for a completely even distribution because all students do not show the same degree of interest, ability, or social skill. All one can do is to persuade the students themselves to limit participation for several reasons: to prevent overfatigue and a too great distraction from classwork among their extremely active members, to give the isolates the experiences they need for developing greater security in their social milieu, and to provide training in leadership for the few who have the necessary qualifications.

The effect of participation in cocurricular activities upon scholarship is almost always favorable. The pupil who has an integral part in the social life of the school does better academic work than the pupil of equal ability who does not. Teachers who feel that cocurricular activities absorb too much time would do well to remember this point.

Most students have at one time or another belonged to clubs or other student groups from which they have, or have not, derived considerable value. It is suggested that each student might find it useful to write a summary such as that given below of his or her own secondary school experiences with activities.

In secondary school one of the writers belonged to a nature study club. During one year, by vote of the members, the club collected rocks. Every Saturday morning about twenty girls tramped over hill and dale looking for specimens. By the end of the year, several hundred had been gathered, classified—with considerable help from an instructor—and properly labeled. There was then an exhibit, with intro-

ductory remarks and explanations by the president of the club. During another year, she belonged to a Latin club whose members decided to translate into Latin and dramatize a story. For reasons long since forgotten, they selected *Bluebeard*. The Brothers Grimm were therefore consulted for a correct version of the tale, which was turned into execrable Latin by one of the girls, thereafter it was examined and rewritten, in even worse versions, by each member until all had had a chance at it. Not content with a classroom dramatization, the girls rehearsed their production and gave the play for the school. Since everyone knew the story no one was inconvenienced by the use of Latin words. One of the writers was Wife Number 2, who died a grueling death, probably from an overdose of bad syntax.

At a still later period there arose among the girls in the school a feeling that the faculty and students did not understand each other. For some obscure reason the means taken to bring about a *rapprochement* was the production by the students of a one-act play in which the teaching of a particularly stupid class was portrayed. Over this chef-d'oeuvre, a committee labored on and off for weeks, the members then assembled a cast of characters and trained them, they requisitioned the embryo artists of the school to create appropriate posters and invitations, eventually they gave their play—which was extremely funny, but not for any of the intended reasons. On another occasion several girls decided to publish a book of poems. They bullied something out of practically everyone in the school, next they persuaded two or three girls who could print nicely to write the poems on fancy paper, then they bound the sheets together and presented the volume to the principal of the school. Toward the end of the last year, about a dozen girls suddenly developed an interest in religion and formed the habit of meeting with one of the teachers every Sunday between breakfast and church. In the course of these meetings they discovered many beautiful passages in the Bible, reached numerous naive conclusions on theological matters, and acquired the beginnings of a philosophy of life.

The Nonacademic Program Cocurricular activities among high school students presumably date back to the first high school, since adolescence is a period of social interest. In most schools a variety of clubs and societies grew up in a decidedly hit-or-miss fashion. Thus, for a few years a literary society would be very attractive and then almost die out for a decade, only to be resuscitated by some strong personality or by popular interest. From the first there were school parties, school plays, and school ceremonies of various kinds. Within the past forty years these somewhat incidental activities have become more numerous and better organized. Many schools have supervisors who devote their full time to the routine necessary for keeping the entire program moving forward. Although many of the societies and other forms of organization are old, an integrated program—functioning as a complement to the curriculum—is new. Consequently, one finds in only a few places a program of activities that approaches what it could become.

Some school officials and teachers do not understand the basic function of the program. They fail to see in the activities any values beyond enjoy-

ment and relaxation. Some teachers regard the cocurricular program as a competitor with their own work—an unfair competitor with lower standards. The greatest values of these activities cannot be obtained if teachers have not learned to use them as supplementary methods for the education of adolescents.

Many clubs are outgrowths of the work in some department of the school, therefore the teachers in that department are the individuals best equipped to supervise these activities. Naturally, the boys and girls should exercise as much control as they can, but they are neither inventive enough nor mature enough to keep a club as interesting or as soundly managed as it will be if it has the assistance of a sympathetic teacher. It is not the idea at all that a teacher should dominate the activities of the students, but rather that she should help them to make the activities more interesting and valuable to themselves. Most teachers have fundamentally no objection to such participation in the nonacademic program of the school. Difficulty arises, however, when a teacher who has already taught six or seven classes in a day is asked to remain after school to assist with a club. Adequate supervision cannot be given casually because it imposes a real burden upon a teacher's time, vitality, and ingenuity. If a school wants its teachers to develop the cocurricular program as well as the course of study, it must make time in the teacher's schedule for work of this sort. One of the writers knows one school that requires its teachers to return one evening a week for club meetings, some of them are back at the school two or three evenings a week. No teacher can carry such a load of nonacademic work and still be able to give her pupils something worth while during class. The two school programs will have to find some way of co-operating, instead of competing, with each other. One method already tried is to lengthen the school day, two or three times a week at least, and to include the activities during the last hour or two as part of the school's regular program. If some such arrangement can be made, most teachers enjoy working with groups of adolescents who have come into a club because of spontaneous interest. Even so, a teacher's class load needs to be reduced before she is in a position to render her best service to the cocurricular program.

Perhaps the two basic difficulties are the lack of relationship between the academic and nonacademic activities of the school and the lack of clearly realized objectives. Adolescent social life tends to "just grow." It is often purposeless and inchoate. Pupils should, of course, enjoy their activities, but they should also grow into better poised and more mature individuals because of them. Merely having a good time is not enough. The academic and nonacademic work of a school should be so correlated that each reinforces the other and they become two related means by which pupils may best realize their possibilities, develop their talents, expand their horizons, and pursue their interests.

Several practical suggestions for carrying out the purposes of the co-curricular program appear below:

In some public schools a definite period is set aside once or twice a week for the meeting of school clubs. Every student in the school attends some meeting. Each pupil is entirely free to select the club he will attend and is also permitted to change from one group to another whenever he wishes. The only requirement is that he should attend some group meeting during the time set aside for club activities. This technique brings the "outside" activities inside the school, where they belong. In some schools a similar arrangement has been made by extending the school days for an hour or more after the completion of classes, and by carrying on various activities during this additional period of time. Thus if the academic work closes at two thirty, the pupils do not leave school until four. Such arrangements are, of course, a step toward an educational use of nonacademic activities because all pupils in the school are automatically involved.

A second step consists in making arrangements whereby the responsibility for managing the various activities devolves upon many different students instead of upon a restricted few. In some schools the following arrangement has been found to work well. In each club there is a central committee of three pupils. Each week one pupil resigns and a new one is added. Each member thus serves for three consecutive weeks before he resigns. Continuity is provided for, since in any given week there are two members from previous weeks. A dispersion of control is also provided for because, in the course of the year, every member in the club will be on this central committee. This arrangement is greatly preferable to the election of three or four permanent officers. In the interests of continuity and student prestige there may be a permanent president for each club—in addition to the central committee—but no other officials are necessary.

For the really educational use of nonacademic activities, it is necessary that someone be charged with the responsibility of bringing about participation on the part of those pupils who most need the training and socialization, and of giving the natural leaders the experience they need in leading. It takes a good deal of tact and quiet persistence to persuade an introverted adolescent to participate in anything, and it takes more tact and an occasional show of authority to prevent the exhibitionist from indulging in the tactics most harmful to his development.

On the other hand, one must not neglect the natural leader to whom adolescents turn spontaneously. These individuals are sure to lead others, and they need practice in the wise controlling of their followers. They are the pupils who have the natural authority to assume such positions as the head of the student government, the president of the senior class, the president of the athletic association, the chief editor of the yearbook, and so on. Such important posts are obviously no place for the inexperienced, it will not help the introverted pupil to be elected to an onerous position, even if school politics could be so managed as to elect him. The situation is best arranged if the natural leaders fill the outstanding posts in a school, where the authority they exercise will influence the largest number, while minor positions are used for the development of personality among those who need, for their own mental health, a little prominence and a little responsibility. Only by individualizing participation—exactly as the classroom teacher has learned to

individualize instruction—can the cocurricular program grow constructively into a means for the development of healthy personalities, and for the expression of the social inclinations, emotional drives, and varied interests of normal adolescents

Summary

A class is a social unit, the members of which are joined together by bonds of attraction or repulsion. These social pressures are very powerful, and in general a teacher should try to work with them, although small, tight cliques and closely bound mutual pairs are sometimes better off if the members do not work together. A sociogram is a most useful device in revealing to a teacher the forces that are operating in her schoolroom.

The position of the teacher in the group is steadily changing from the traditional authoritarianism to a constructive, nondirective, permissive type of leadership. A teacher is well advised if she develops a habit of checking her own classroom comments to determine what proportion of them could be classified as constructive.

The cocurricular life of the school can be of great value to the students and should therefore be encouraged by teachers. It is, however, necessary that all pupils should have some part in it and that no pupil should carry too heavy a load. The program should be as extensive as possible without trespassing upon the academic life of the school.

References for Further Reading

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26

The High School Teacher

Of late years a good many investigations of teaching efficiency at the high school level have been made. One can now say quite definitely what is and what is not good teaching for adolescents. The present chapter will be concerned with a brief summary of such facts as seem reasonably well established. There will also be consideration of the typical problems that teachers have to solve and the difficulties inherent in their work.

Next to a child's parents, his teachers are the most important formative influence in his life. He is with them five or six hours a day, five days a week, for at least ten years and probably longer. The first teachers a child has are extremely influential in conditioning him. By adolescence, some of their authority has worn off, but the boy or girl has developed a new and friendly relation with teachers, on a more mature level. A teacher continues to exert influence through personal contacts, through the atmosphere she creates in the classroom, through her instructional methods, and through her observation of her pupils. In the promotion of mental health and normal personalities she is undoubtedly the key person in the educational world.¹

The Teacher's Personality

In all investigations certain traits of personality have been shown to be especially significant for acceptance of a teacher by adolescents and certain others for rejection. The usual method of investigation has been to determine by vote of the students themselves which teachers in a high school are particularly successful and which are thoroughly disliked. The students then rate whichever of these teachers they have had in class for at least a semester. There is always some criticism of such student ratings,

¹ E. B. Cason, H. V. Funk, R. Harris, R. Johnson, F. L. Newbold, and H. H. Willis, "School Practices in Promoting Mental Health," *American Council on Education Studies*, Series I, no. 40, 14 121-136, 1950.

on the grounds that they are unreliable. So far as ratings of instructional competence are concerned, they may very well be, but the students are the consumers, and they know what they can consume and what they cannot, even if they are sometimes foggy as to the reasons. They also know whether or not they like or dislike a given teacher, and they can often tell why. In any case, they are the *only* people who know what goes on in a classroom day after day. If one asks them questions that are specific enough, they can give reliable answers.

In reading through the descriptions given in Table 55, a prospective teacher would do well to try a little soul searching to make sure that he or she is fitted for teaching, or can develop the essential traits. Many fine individuals of irreproachable character do not make good teachers because, fundamentally, they are not interested in people. They make excellent research chemists, cataloguers in libraries, or commercial artists. Other, and most admirable, people belong in social work or in some form of religious endeavor rather than in teaching. It is no disgrace to be a type of person who makes a poor teacher; what is disgraceful is to persist in teaching when one has no talent for it.

By examining herself with tests of personality now available, a prospective teacher can find out whether or not she has a suitable or sufficiently modifiable personality structure for teaching, before she spends time, money, and effort in preparing herself for this type of work. If she lacks several of the more important traits, interests, and abilities, she would be well advised to consider some other occupation.

One might suppose that care in the selection of teachers and a moderate degree of supervision in service would either prevent abnormal people from entering the profession or would soon eliminate them once they are in. Several studies suggest that such is not the case. Thus, one investigator classified 278 teachers in service by assigning each into one of three groups: those who were satisfactory, those who were slightly maladjusted, and those who were so neurotic as to be unacceptable.² Of the entire group, 67 per cent were rated as having good mental health and as being stimulating to the growth of their pupils. The slightly maladjusted totaled 20 per cent, this figure included those rated as neurotic (17 of the 278, or 6 per cent). It was felt that the oddities of these teachers, while undesirable and cramping to their own development, were not such as would not yield to treatment. In some cases, the maladjustment was of a kind that did not interfere seriously with teaching. The remaining 13 per cent of the total group were seriously maladjusted and were having a destructive influence upon their pupils. The study does not tell whether the unsatisfactory teachers were

² G. M. Meredith, "Administrative Procedures That Improve the Morale and Mental Health of Teachers," *Education*, 63:627-630, 1943.

Table 55 CHARACTERISTICS OF GOOD AND POOR TEACHERS

<i>The Good Teacher</i>	<i>The Poor Teacher</i>
A Traits of Character	A Traits of Character
1 Has a genuine love for young people and enjoys being with them	1 Dislikes young people and does not enjoy being with them
2 Finds great emotional satisfaction from teaching	2 Regards teaching as a form of drudgery
3 Is vigorous and healthy	3 Is not vigorous and is sometimes sickly
4 Has enthusiasm and drive	4 Is bored and apathetic
5 Is attractive and neat	5 Is slovenly in appearance
6 Is emotionally mature	6 Is emotionally childish
7 Is emotionally stable	7 Is emotionally unstable
8 Feels personally secure	8 Has feelings of insecurity
9 Is reasonably free from fears and anxieties	9 Is ridden by fears and anxieties
10 Is interested in others	10 Is interested in herself
11 Gets along well with others	11 Has feuds and quarrels
12 Is well integrated	12 Is disorganized
13 Is tolerant	13 Is often intolerant
14 Is fair and impartial	14 Has favorites and scapegoats
15 Has a good sense of humor	15 Has little humor
16 Is patient and even-tempered	16 Is impatient and irritable
B Social Adjustment	B Social Adjustment
17 Has so satisfying a life outside school that she does not need to work off her emotions in school	17 Has so unsatisfactory a life outside school that she uses pupils to work off her emotions
18 Can accept even hostile pupils unemotionally	18 Rejects pupils, especially those who are hostile
19 Identifies herself with pupils	19 Cannot identify herself with pupils
20 Treats pupils as individuals	20 Rarely treats pupils as individuals
21 Understands adolescents	21 Does not understand adolescents
22 Adjusts to pupils by being friends with them	22 Adjusts to pupils by domineering over them
C Instructional Methods	C Instructional Methods
23 Plans work carefully	23 Rarely makes plans
24 Emphasizes understanding	24 Emphasizes memorizing
25 Is prompt and systematic	25 Is casual and unsystematic
26 Helps individual students	26 Teaches students as a group
27 Utilizes student opinion	27 Presents her own opinions
28 Relates work to student life and interests	28 Is not interested in students or in their ideas
29 Has ingenuity, varies work	29 Is rigid, work is monotonous
30 Wants pupils to express opinions	30 Imposes her opinions on pupils
31 Prevents most disciplinary situations from arising	31 Rarely heads off disciplinary crises and may enjoy them
32 Uses, when necessary, discipline that is constructive to pupil's growth	32 Uses frequent and destructive discipline

Based on the following articles: M. Amatori, "Self-Appraisal in Teacher Personality," *Journal of Educational Psychology*, 46 94-100, 1955; P. R. Grimm and C. J. Hoyt, "Excerpts from Two Instruments for Appraising Teaching Competency," *Journal of Educational Research*, 46 706-710, 1953; E. R. Guthrie, "The Evaluation of Teaching," *American Journal of Nursing*, 53 220-222, 1953; A. T. Jersild and F. B. Holmes, "Characteristics of Teachers Who Are Liked Best and Disliked Most," *Journal of Experimental Education*, 9 139-151, 1940; C. H. Leeds, "Teacher Behavior Liked and Disliked by Pupils," *Education*, 75 29-37, 1954; J. E. Moore, "Annoying Habits of High School Teachers," *Peabody Journal of Education*, 18 161-165, 1940; A. S. Neill, *The Problem Teacher*, International Universities Press, 1944, 160 pp.; D. G. Ryans, "The Investigation of Teacher Characteristics," *Educational Record*, 34 371-396, 1953; P. M. Symonds, "Characteristics of the Effective Teacher, Based on Pupil Evaluation," *Journal of Experimental Education*, 23 289-310, 1955; C. A. Weber, "Some Characteristics of College Teachers," *Journal of Educational Research*, 46 685-692, 1953.

maladjusted before they began to teach or if they became so subsequently. What is needed is a long-time study in which the personal adjustment of several classes of graduates from teachers colleges is measured while they are still in school and the results allowed to sleep for twenty years, until time has had a chance to give the investigator the answers

Teachers have their own problems just as other human beings do. Some are unavoidable, but certain mental and emotional hazards that affect their work are not inherent in the task of instruction but in various restrictions and situations that do not need to exist. If a teacher could be sure of progressing upon the basis of her merit, if she could participate in the determination of the policies under which she must live and in the development of the curriculum that she must teach, if she could be paid a salary commensurate with her social usefulness, if she could enjoy a secure status of respect, and if she could be asked to handle only a third to a half as many children as are generally assigned to her, many of her worst difficulties would never arise.

Table 56 PERSONAL PROBLEMS ENCOUNTERED BY TEACHERS
(*Figures are percentages.*)

	Men	Women		Men	Women
1 Inadequate salaries	50	29	14 Community demands	26	14
2 Arranging interviews with parents	50	31	15 Range of maturity among pupils	26	17
3 Teaching dull pupils	42	37	16 Outdated school plant	24	13
4 Finding living space	42	16	17 Teaching handicapped pupils	22	15
5 Grading and marking	40	34	18 Lack of preparation	22	7
6 Promotion or retention	38	35	19 Teaching gifted pupils	18	18
7 Teaching load	38	29	20 Problems of discipline	18	10
8 Individual differences	36	34	21 Problem parents	16	8
9 Too large classes	36	41	22 Grade level expectations	18	21
10 Domestic obligations	30	12	23 Course of study requirements	18	16
11. Handling maladjusted pupils	30	35	24 Social life	10	15
12 Aiding pupils after absence	30	35	25 New educational ideas	10	10
13 Teaching pupils who dislike school	28	12			

Based on Q. B. Mills and D. Rogers, "Personal and Professional Problems of Elementary School Teachers," *Journal of Educational Research*, 48:279-288, 1954.

Problems of Teachers: An excellent study of the problems encountered by teachers lists twenty-five as being most frequent. The percentages that appear in Table 56 are for those who reported each problem as being serious and pressing. Over twice as many found these problems frequent

and sometimes disturbing but were able to handle them with only minor difficulty. Teaching is complex, responsible work, and it is not surprising that teachers have many problems, both personal and professional. When a teacher's morale gets low, as it does if she has unsolved problems, the achievement of her pupils also becomes low. Moreover she is likely to waiver her own personality and to have a disorganizing effect upon the pupils.³

Communities do not seem to learn very rapidly that good teaching has to be paid for just as much as good dentistry, or good carpentry, or good plumbing. As long as teachers are underpaid and overworked, many of them are going to develop warped personalities unnecessarily. There are, to be sure, some elements of tension that are more or less inherent in the teaching situation. Teachers as a group suffer from an inability to relax, from overstrain, from a sense of futility—especially when their best efforts do not seem to be producing a reasonable amount of learning in their pupils—from fatigue, from too-restricted social contacts, from boredom with routine, from too much verbalism, from too much administrative and supervisory pressure, and—unless married—from sex starvation. Like other human beings, when they have personal maladjustments, they are likely to project their troubles upon those nearest, in this case their pupils, and to use their teaching as an outlet for their own frustrations. The stories below describe two teachers, both of whom were unsatisfactory.

Miss X was a most amiable young woman who taught history. She was well prepared for her work and had come to her school with the best of recommendations. I had the misfortune to be in the first class she ever taught. Even at the time I realized she was painfully embarrassed and upset. She was afraid of her students and did not have the least idea how to catch their interest. At the first meeting her voice was barely audible, she looked steadily at her own feet, and she was either so underprepared or so rattled that she ran completely out of material before the middle of the hour. It was her bad luck that she had in the class three girls of the immature, silly type who liked nothing better than to make trouble for the teacher, this particular trio would have discouraged even an experienced professor. Before the class had been in session for ten minutes the three had begun to whisper and giggle, soon the disturbance spread to other parts of the room. Miss X was totally unprepared for anything of the kind. She blushed and stammered for a while and then let the class go. The next day was no better. During the hour several girls began to hum softly, by keeping their heads bent over their notebooks, they could prevent Miss X from seeing who was singing at any given moment. This obligato threw her completely off what little balance she still had, and again she was forced to dismiss the class early. The disturbances continued during the whole first week, getting somewhat worse every day.

By the end of the second week Miss X began to cry in class. The first outburst

³ L. W. Anderson, "Teacher Morale and Student Achievement," *Journal of Educational Research*, 46: 693-698, 1953.

took everyone by surprise and produced a quiet room, but the effects soon wore off, and subsequent tears were barely noticed. The students learned nothing, and the room was usually in a state of noisy confusion. Once in a while some of the girls got tired of the situation and "cracked down" on the others for a day or so. During these periods of respite Miss X's work was interesting and worth while. She had clever ideas and ingenious methods of presenting them, but her voice remained weak and her manner diffident. During rare quiet periods Miss X showed real promise of teaching ability, if she could only learn to keep the group under control. Unfortunately, she did not learn in time to hold her first job. Although she was later more successful—particularly with small groups of brilliant pupils who really wanted to listen—she has never been the superior teacher she should have been in view of her undoubted capacities. Her most satisfactory work has been done as a tutor, a type of work to which she was assigned because she had taught long enough to have tenure, and the school did not know just what to do with her. So she was made what was locally called a "helping teacher." In these individual relations, she has been excellent.

Mrs. B. had a fine reputation in the high school where she had taught for five or six years. She was a cheerful, extroverted, energetic person, who was the administrator's delight, because she always got reports in on time, completely made out, and without urging. With the other teachers she was moderately popular, although some of the more perceptive among her colleagues had often wondered about her. The dean of girls and the dean of boys also had some questions in their minds about her, as did some of the counselors. There were not many actual complaints about Mrs. B. on the part of the students, but altogether, too many girls and boys arrived at the class following hers in an emotionally upset condition.

In the course of Mrs. B.'s fourth year in the school, her oldest daughter had a "nervous breakdown," and her son, a boy of twelve, became a delinquent. The daughter, a girl of fourteen, remained at home under a doctor's care for about three months. After an attempt at suicide she was put into a "home" for further observation and treatment, although Mrs. B. was most reluctant to let her go. The first definite evidence against Mrs. B. came by the grapevine route from the doctor who was treating the daughter; he told the school doctor that the girl was terrified of her mother. The school doctor then had a talk with the delinquent son and found much the same reaction in him; his thefts had been for the purpose of getting together enough money to run away from home and to hide himself thoroughly from his mother. Then the school doctor began to ask questions of Mrs. B.'s students, and from them he got similar but less definite evidence. When he had accumulated enough ammunition, he talked with the principal of the high school, who simply did not believe that Mrs. B. could be an unsatisfactory teacher. He had always found her cheerful, chatty, rather witty, and full of energy. He did, however, make a few inquiries of his own among some of the older members of his staff, and what he heard, while not definite, did not please him.

At the beginning of the next semester, there were an unusual number of voluntary withdrawals from school. With an idea of finding some reason for the increase, he had his secretary list the courses each dropout had just completed. To his surprise, all but two had been in one of Mrs. B.'s classes. He already had begun

to suspect that underneath her cheerful exterior this woman was domineering, narrow-minded, petty, and mean whenever she could show these traits without being caught. In a subsequent interview with Mrs. B. he could not penetrate her façade. None of the voluntary withdrawals had failed a course with her, and most of them had received fairly good marks. He then went to three or four homes of these dropouts and talked with the adolescents, but he came away only with the conviction that something was very wrong. Some of the parents were sure their son or daughter was "scared to death" of Mrs. B., but the youngsters themselves were too cowed to talk. Matters finally came to a head when a sensitive and sickly girl rushed out of Mrs. B.'s classroom and tried to throw herself out of a window, being prevented only by the janitor who happened to be passing. The principal discharged Mrs. B. that day, telling her that she could sue the school for breach of contract if she wanted to. The next day he met her classes. When the pupils learned that the woman was gone, they talked. After that, he had too much evidence rather than not enough. She had maintained her position by a combination of surface amiability with those in authority and such mean, sadistic persecutions in class that pupils literally did not dare to complain about her. Mrs. B. is an example of probably the most dangerous type of unsatisfactory teacher—a person with deep, unsolved emotional problems who has achieved a deceptively good superficial adjustment.

The Rating of Teachers

It is not at all difficult to find out what takes place within the four walls of a classroom, even without being there. One need only watch the behavior of the pupils, if evidence is desired, one can ask the pupils to reply to a series of objective questions. Adolescents can give excellent testimony concerning what goes on from day to day in class. For the rating of teachers this method of approach is better than supervision from above, because supervisors see only the teachers' best efforts, while the pupils see their teachers on good days and bad ones. A systematic, objective, routine report by every student in every class at the end of every semester is greatly preferable to the usual method of waiting for enough individual pupils to come with complaints to the principal's office. For one thing, the routine report is routine and is therefore made with relative lack of emotion, whereas an investigation of complaints is an upsetting affair for everyone. It is quite true that some pupils give superficial judgments, so do some parents and some supervisors. But if all students are asked for opinions, the superficial guesswork of a few is not important. If a principal really wants to find out what his teachers are like from day to day, he has to ask the only people who know—the teachers' students. He can do so most easily by introducing a routine procedure by which every teacher in school is rated anonymously by every student every semester. The plan is relatively simple and has been carried out with success in several places. At the end of each semester all

the students in the school are provided with a sufficient number of questionnaires to rate each teacher with whom they have just studied. The questionnaires consist of such inquiries as these

- 1 How regularly do you feel afraid of this teacher?
Answer very often, often, sometimes, occasionally, never
- 2 How often did this teacher have to punish students?
Answer very often, often, sometimes, occasionally, never
- 3 How regularly did this teacher "pick on" a single student?
Answer very often, often, sometimes, occasionally, never
- 4 How often did this teacher lose her temper and scold students?
Answer very often, often, sometimes, occasionally, never
- 5 How often was this teacher sentimental about or toward students?
Answer very often, often, sometimes, occasionally, never
6. How often was this teacher sarcastic?
Answer very often, often, sometimes, occasionally, never

Since the ratings are anonymous, pupils may express themselves without fear of personal involvements. There will usually be, for each teacher, two or three unfavorable ratings, handed in by pupils who dislike her and have taken this opportunity to express their feelings. If such results appear only rarely they can be disregarded, but if a hundred students report a teacher as losing her temper very often, fifty more as losing her temper sometimes, and another fifty as losing it occasionally, while only ten or a dozen report that she never loses her temper, the administrator can be sure that the teacher under consideration is too poorly inhibited a person to be trusted with teaching.

There are, of course, rating scales of more formal character that can be used if desired. These often help a teacher to rate herself, since the items may call to her attention some matters that she had not previously thought of. One such scale gives an average of 131 points for a group of teachers rated as superior by their principals, 103.5 points for those rated as average, and —32 points for those judged as unsatisfactory⁴. Other scales cover such topics as the quality of classroom management, the clarity of objectives, the degree of co-operation, the quality of incentives, the motivation intensity level, the provision for the psychological needs of the pupil, and the individualizing of instruction. A young teacher can learn much by examining such materials.

The Teacher and Referrals

In several earlier sections there has been discussion of various individual problems that arise in the classroom, and it has frequently been

⁴ C. H. Leeds, "A Scale for Measuring Teacher-Pupil Attitudes and Teacher-Pupil Rapport," *Psychological Monographs*, Vol. LXIV, no. 4, 24 pp.

suggested that the teacher should "refer" a pupil to expert personnel for help. With every passing year teachers find it desirable to make more and more such referrals, and it is best for them to see clearly their part in the entire proceeding.

The function of the teacher—as well as her most constant source of error—is well illustrated by the case of Susie M. who was sent to a general clinic with a note from her teacher stating that the child was not learning to read because her vision was inadequate, and would the clinic please do something about the matter. The oculist's report came back to the central clearance in about ten minutes: the girl had perfect vision in both eyes. The clinic manager then started the child through the routine tests, to find out if there was anything wrong with her, or if the teacher had made a mistake. Within a half-hour, back came a report from the hearing clinic: Little Susie had only 30 per cent normal hearing! So the requested glasses turned into a hearing aid, and Susie's schoolwork picked up considerably. But there is a moral to this story. The teacher was both right and wrong. She had picked out the right child, and her suspicion that something was interfering with normal progress was correct. Her error was in *making a diagnosis*. This is a tendency against which every teacher has to guard. She is within her province when she makes an educational diagnosis, but she has no authority to make a medical one. Moreover, she always runs the risk of "labeling" a pupil with a wrong diagnosis that will follow him about for years and can do a great deal of harm. This teacher should have sent little Susie with a note that gave her basic reason for the referral: Susie was not learning to read. From then on, the business of determining the nature of the handicap was the concern of someone else. Her diagnosis was wrong, but her sensing a handicap and her sending the pupil for examination were right.

Teaching Adolescents

This is not a book on teaching methods but a text on the psychology of adolescence. No attempt will therefore be made to comment upon general principles of teaching or upon teaching techniques in any particular subject. The following paragraphs are not intended to discuss methodology in high school, but rather to focus attention upon a few outstanding characteristics of adolescents, to whom the teaching must be adjusted.

Boys and girls of high school age are rather impatient of drill or monotony. They want an ever-shifting variety and excitement in their lives. The teacher who day after day simply assigns the next ten pages in the textbook allows the preparation of lessons to become unbearably monotonous. These statements do not mean that no drill subjects should be taught. Work involving drill should, however, always be directed toward some

purpose the adolescent wishes to achieve. Thus the boy who has become interested in attending a foreign university willingly spends countless hours in mastering the necessary language. The girl with ambitions to become a private secretary will spend similar amounts of time in monotonous drill on stenography and typing. The student who wishes to enter a private college for which severe entrance examinations must be passed is no longer resistive to drill. The point to remember is the difference in motivation between children and adolescents. Children will memorize addition combinations either to please the teacher or to have a gold star placed after their name on the blackboard. During adolescence, the students must be stimulated to drill themselves because they can see, through the drill and monotony, a goal they are eager to reach.

The work in high school must be interesting. This statement is not made in defense of a painless education. Classroom work must compete with all the other things a boy or girl likes to do. The adolescent will spend time in studying only if the work is as interesting as the other things to which the same time might be put. If classwork is not interesting it will be neglected in favor of athletics, extracurricular activities, individual schemes of various sorts, money-making tasks, reading of light fiction, dances, or other such diversions. The adolescent can no longer be controlled, as the child can be, by mere authority, and he is not yet old enough to be controlled by economic pressure. In the intervening years he will therefore follow his interests. It is part of the teacher's business to capitalize on them.

Classroom work must furnish adolescents with an opportunity to exercise their minds. Naturally, the assignments appropriate for the more capable are too difficult for the dull, but for pupils of all levels of ability there must be a real opportunity for mental effort. Boys and girls of this age spontaneously spend hours in solving all kinds of puzzles or in playing games that demand quick thinking and cleverness in outwitting one's opponent. Assignments therefore need to present puzzles that will intrigue the adolescent into thinking.

Whenever possible, subject matter should be approached through the emotions and imagination rather than through impersonal logic. Adolescents are stimulated by anything in which there is a bit of romance. They show this inclination clearly in their choice of movies or reading matter and in their hero worship of some idealized historic or fictional character. The chemistry teacher might bring about more learning of chemistry if he would start his course with the reading of *Crucibles*; the biologist would be well advised to begin his elementary classes with the reading of *The Microbe Hunters*. Such reading is stimulating to the imagination and ideals of youth and serves to maintain adolescent effort through the hours of drill necessary in the first year of any science. Naturally, a profound arousal of the emotions is undesirable, but too little stimulation is equally fatal to schoolwork.

One of the adolescent's favorite illusions is his conviction that he is now an adult. He therefore insists upon his ability to manage his own affairs and resents having his work arranged for him. Instead of regarding detailed directions for preparing an assignment as a help, he is likely to regard them as an unwarranted intrusion upon his sense of independence. Pupils in high school should be allowed, within reasonable limits, to plan their own work and the means of getting it done. Some guidance must, of course, be given—but primarily when asked for. Arranging his own work not only gives an adolescent a feeling of independence but arouses responsibility for getting the work done. If he has planned a particular task, he is working for himself, not the teacher. Decisions made in relatively unimportant matters often bring about a quite disproportionate conviction of self-direction. Thus if an English teacher wants pupils to read part or whole of an epic, she may either assign a particular epic or she may tell the pupil to find out what epics there are and then to select for himself which one he will read. The second type of assignment is decidedly preferable.

Whenever possible a pupil should be allowed to tell his classmates what he has found out about a given topic and to discuss it with them. The traditional recitation, during which the student talks to the teacher, is not a desirable method for socialization—aside from being a poor method for other reasons. The strong drives for social approval and prestige make socialization especially desirable.

The material that goes into a course has to be selected upon one basis or another from the total data available in a given field. It is best to select those items that have the greatest immediate practical usefulness to the adolescent, in school or out. Pupils have many problems of their own, to the solving of which schoolwork should contribute. Whenever teachers see a chance, they should make such applications and give such examples as will be of greatest service to the pupils in their daily living.

Finally, teaching should emphasize, insofar as the particular group being taught can appreciate, the general implications, conclusions, and theories inherent in the facts under consideration. For the first time in his life, the high school pupil is able to regard a general principle as something more than a series of words to be memorized. When he discovers that theories give him an explanation of otherwise puzzling facts, he is eager to have more of them and thus achieve further enlightenment. Most adolescents want explanations of *why* things happen. In contrast, the child is content to know *what* happens. As will be pointed out in the last chapter, an adolescent has not become an adult until he has achieved some integrated attitude toward himself and the world about him. Although too much theory leads to bewilderment, too little leads to failure in achieving an adult point of view.

Teaching in high school should, then, have the following eight char-

acteristics if it is to motivate the learner into getting his work done. it must relate drill to some desired purpose and must eliminate sheer monotony as much as possible, it must be interesting, it must give the adolescent mental exercise, it must stir his imagination, it must allow him to feel and develop his independence, it must socialize him, it must give him insight into his daily life, and it must provide him with as many explanations as he can understand. Work that lacks these characteristics simply does not get done because learning cannot be brought about without the earnest co-operation of the learner.

The extent of the changes in the objectives and methods of the secondary school is well reflected in an excellent analysis of the modern teacher's duties ⁵. She is to study her pupils as individuals and as members of groups, to study group processes to determine what leads to acceptance, rejection, leadership, values, participation, to create an environment in which the emotional atmosphere, the feeling of belonging, and the security will lead to learning, to establish the best possible personal relationship with her class, to organize classroom situations so that learning will take place, largely by using the interests of the pupils, to observe the needs, interests, and frustrations, to help pupils organize themselves in groups for carrying on the activities of the classroom, to aid pupils in the selection of the most worthwhile experiences, to apply such therapy as may be needed to remove fear, insecurity, prejudice, and so forth, to record the progress of each pupil in health and in social and emotional adjustment, and to help the pupil to interpret the facts relative to his own growth and adjustment. Conspicuously absent from this long list is any direct mention of subject matter, of "teaching" in the conventional sense, or of discipline. The fundamental theory is that all children will learn spontaneously and will behave themselves acceptably if their surroundings furnish them with security and if their personal frustrations can be eliminated. The teacher therefore concentrates upon the pupil and the social situation and lets the learning look after itself. Perhaps this procedure is better adapted to the present generation of high school students than are the traditional methods, but one sometimes wonders if the modern emphasis upon socialization and integration is not so extreme as to precipitate a partial return to earlier instructional precedures, with an eventual blending of what is best in both.

Summary

There are thousands of excellent teachers in the secondary schools. They do a great deal to help adolescents develop normally, and they find for themselves great emotional satisfaction in their work. It is perhaps

⁵ Based on C. B. Mendenhall and K. J. Arisman, *Secondary Education*, The Dryden Press, 1951. 424 pp. (Pp. 76-81.)

unfortunate that in the literature one finds more about the unsatisfactory teacher than one does about those who are outstandingly good.

Teachers, like everyone else, can become maladjusted if their lives contain unsolved problems or if for any reason they are unhappy in their work. Among the commonest symptoms of maladjustment among teachers may be listed the following: the presence in the class of favorite pupils and "goats", the use of status or size to overawe or menace pupils, an abnormal classroom quietness that comes from repression, alternating with outbursts of noise, quickly repressed and punished, general physical inactivity of the children, plus much minor, unofficial, secretive activity, punishment or criticism of pupils for things they cannot help—such as scolding a near-sighted child for getting out of his seat to see what is on the blackboard, or punishing a hysterical child for vomiting, or ridiculing a fast-growing adolescent for being lazy, use of many dogmatic statements and absence of discussion, frequent displays of emotion, whether appeals to the pupils to perform certain tasks out of loyalty to the teacher or threatening attitudes toward childish wrongdoers, or habits of caressing the pupils, or frequent outbursts of rage against the whole class, reluctance of the pupils to talk in class, use of frequent punishments or constant nagging, use of sarcasm or ridicule or any attempt to shame a given pupil, especially in public. To these observable symptoms may be added the less objective characteristics of an inability to get on with one's colleagues and supervisors and a bad reputation among one's students. Teachers showing such traits are a menace to the mental health of their students, and they are further damaging themselves by a continuance in work that does not satisfy their needs.

References for Further Reading

BOOKS

Other Texts

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 Wattenberg, *The Adolescent Years*, Chap. 23.

Other Books

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Personnel Work in the High School

The personnel department of a high school has many functions. It collects data, it gives courses, it administers tests, it does research, it gives interviews, it provides guidance, it finds jobs for students, it helps them with whatever problems arise. Not all these functions will be discussed in this chapter, which will be restricted mainly to two topics—the general purpose of the guidance program and the specific work in vocational guidance.

The Personnel Movement

The guidance program of the high school started in a modest way as a means of advising adolescents about future occupations. As the movement grew, its objectives and methods both changed. The counselors are now expected to furnish guidance in any phase of a pupil's development. This broadening of the objective was more or less forced upon counselors, partly because the choice of vocation involved measurement of each pupil's personal traits and consideration of his entire history and partly because the pupils continually pestered the guidance personnel for help in all sorts of difficulties. A good definition of counseling at the present time is as follows: Student counseling is a purposeful, face-to-face relationship between a counselor and a student with focus upon the student's growth in self-understanding and self-decision, to which the counselor contributes careful understanding and skillful assistance.¹ From the first there were a few writers on guidance who emphasized the supplying of information rather than the giving of advice, but in the early days the counselors—at best untrained teachers who seemed to have a flair for getting along with adolescents—were somewhat too eager to advise and too reluctant to provide data and let the pupils make up their own minds. In recent years the "nondirective" type of counseling has come into use. The counselor's part in the con-

¹ C. G. Wrenn and W. E. Dugan, *Guidance Procedures in High School*, University of Minnesota Press, 1950, p. 28. See also D. E. Super, "Transition from Vocational Guidance to Counseling Psychology," *Journal of Counseling Psychology*, 2: 3-9, 1955.

ferences is mainly to keep the pupil talking, to recall him to the subject in hand in case he strays too far away from it, and to suggest books or reports that he might read. Essentially, however, the adolescent works out his own salvation, guided and occasionally prodded but not advised by the counselor. As he talks and reads and talks again, he gradually begins to see what his problems are, and his own discovery of them convinces him of their reality and importance. Then he asks about possible solutions and, again gradually, works his way to an acceptable adjustment. This procedure takes far longer than the giving of advice, but its advantages are obvious. The adolescent comes to the counselor of his own volition and as many times as he thinks he needs to, he talks about whatever is puzzling him, he finds the counselor an excellent and sympathetic listener who will really hear him out, he discharges a considerable proportion of his emotional difficulties by mere talking, and he solves or at least adjusts his own problems largely by his own efforts.

Most students come willingly and voluntarily to talk with the counselors, but there are a few who resist counseling, although they are aware that they have problems which they cannot solve alone.² The main source of resistance—except in the occasional instance of a personal dislike for a particular counselor—is the fear of revealing oneself to others, and especially to an older person, who may have a different point of view and a different standard of conduct from those of the student. A few students also show the same resistance with which a psychoanalyst is all too familiar—a fear of finding out about themselves.

The objective of counseling was generally reported to be the educational, vocational, and personal adjustment of pupils through the solution of whatever problems may exist. This diversity of problems is perhaps not of the counselor's own choosing. It arose as soon as the counselors stopped talking and began to listen, stopped leading and began to follow, stopped advising and began to guide. Since the pupil holds the initiative and in the permissive atmosphere of the counselor's room can direct the conversation as he wishes, the number of problems a counselor has to deal with is limited only by the number brought up by the pupils for discussion. One writer has classified under the following headings the motives that brought students to the counselor: lack of assurance, information, or skill, excessive dependence on others, cultural conflict (as between an American-born student and his foreign-born parents), conflict between student and age-mates, family, or teachers, conflict within the individual from divergent urges, and anxiety over his choice of courses, future occupation, or both.³ One can see that

² M. Holman, "Adolescent Attitudes towards Seeking Help with Personal Problems," *Smith College Studies in Social Work*, no. 3, 25 1-31, 1955.

³ H. B. Pepinsky, "The Selection and Use of Diagnostic Categories in Clinical Counseling," *Applied Psychology Monographs*, 1948, no. 15, 140 pp.

a counselor is forced into providing guidance in many fields. A list of counseling activities in 447 high schools appears in Table 57.

Table 57 NATURE AND FREQUENCY OF COUNSELING ACTIVITIES
AMONG COUNSELORS IN 447 HIGH SCHOOLS

		<i>Per cent</i>
Information	{ about school	34
	{ about courses	48
	{ about occupations	61
	{ about activities	35
	{ about hobbies and uses of leisure	35
Help	{ in choosing career	64
	{ in getting along with other people	50
	{ in preparing for a career	58
	{ in selecting courses	58
	{ in improving relationships with family	39
	{ in boy-and-girl relationships	35
	{ in learning better methods of study	64
	{ in getting part-time work	40
	{ in getting a job after graduation	48
Testing	{ in developing better manners	30
	{ for abilities and interests	56
	{ of personality	42
Counseling	{ for special aptitudes	52
	{ on personal problems	67
	{ on vocational problems	70

From N. E. Wimmer, "Guidance in Secondary Schools," *School Review*, 56:346, 1948. Used by permission of The University of Chicago Press.

In order to carry out his or her part in the personal interviews with students a counselor needs to have a good deal of information about each student. For this purpose, the personnel office usually amasses data covering the following topics:

<i>Areas of Information</i>	<i>Means of Appraisal</i>
1. Scholastic aptitude	Previous grades, psychological tests of ability and achievement
2. Scholastic achievement and basic skills	Previous grades, standardized and teacher-made achievement tests, survey and diagnostic tests of basic skills, school activities, and work experience
3. Special abilities: clerical, mathematical, artistic, and the like	Special aptitude tests, interviews, evaluation of previous achievement or performance (work experience, hobbies, extracurricular activities)

4 Interests and plans	Autobiographies, interest inventories or tests, stated interests, interviews, previous achievement, and both work and leisure activities
5 Health and physical status	Physical examination, health history, observation, attendance record and nurse follow-up, and family consultation
6 Home and family relationships	Observation, anecdotes, rating scales, interviews, autobiographies, themes, check lists and adjustment inventories, reports from employers, group workers, or group leaders, and parent conferences
7 Emotional stability and adjustment	
8 Attitudes	Student questionnaires, home contacts, interviews, themes, autobiographies and other documentary information, and standardized rating scales
9 Work experience	Record of employer, reports of vocational counselor, interviews, and student questionnaires ⁴

Without this background, counselors are unable to furnish the necessary guidance because they are not sufficiently acquainted with the students to whom they talk

The success of a guidance program may be measured in a number of ways, many of which are indirect. If guidance actually helps students, they will stay in school longer, change their schedules less frequently, pass more of their courses, and get into fewer difficulties of adjustment. A few of the possible criteria are listed below

- 1 Reduction in the number of academic failures
- 2 Reduction in the number of disciplinary problems
- 3 Reduction in the number of requests for program changes
- 4 Increase in the use of the counseling service
- 5 Increase in the relationship between vocational choice and ability
- 6 Increase in the holding power of the school
- 7 Increase in the number of students who participate in school activities
- 8 Increase in the use of service by former students
- 9 Increase in successful job placement⁵

Naturally, other forces operating in the school also affect these criteria. One must therefore use caution and, in an investigation, control carefully such factors as changes in promotion policy, in curricular offerings, and so on.

⁴ From C. G. Wrenn and W. E. Dugan, *Guidance Procedures in High School*, copyright 1950, University of Minnesota Press, pp. 18-19. Used by permission of the University of Minnesota Press.

⁵ *Ibid.*, p. 60

Perhaps the most convincing evidence of value is the increase in the number of schools that have introduced personnel work. In 1932, only 28 per cent of high schools with an enrollment of 1,000 or more had counselors. In 1956, the proportion had grown to over 70 per cent. Individual counseling is done by the counselors or the homeroom teachers, while group guidance is given through school assemblies, orientation, or occupational courses.

Vocational Guidance

An adult's chief business is to work, and many of his chief joys come from his successes in the world of practical accomplishment—whether his achievement consists in selling real estate, composing operas, laying sewers, or designing hats. Because success on the job is so important in adult life, it is a terrible blow to fail—either actually or in relation to one's expectations. In addition, an individual who has failed—now handicapped by an exhausting emotional experience—must start all over in some new line of work, which must obviously be no better than a second choice. Not all debacles can be foreseen, but much travail of spirit and loss of self-confidence may be avoided if high school pupils can be guided into types of work for which they are fitted.

The making of a vocational choice is an outstanding problem of adolescence. The ambitions of children have too little relationship to reality to be used as a basis in selecting a career, and after the days of adolescence are over there is no time left. The typical development of vocational interest is from active, exciting occupations of low prestige value—being a cowboy—to emotionalized ambitions having great prestige—being a famous trial lawyer—and finally to some occupation that represents a compromise between what a person would like to do and what he thinks he can do.

The Need for Guidance Nothing is easier to demonstrate than the need of an adolescent group for help in making sensible vocational choices. One sample study should suffice, although it could be duplicated many times over without much searching of the literature. In 1954, 800 boys and 772 girls in several high schools were asked to state their vocational choice. The nature of these choices are shown in Figure 153. In the same figure appear the percentages in the general population that are employed in each line of work chosen by the high school students. It is at once obvious that the selections are impractical. Over two fifths of these boys and girls wanted to enter professional fields, but less than 9 per cent of adults are so employed. Unless there is a great increase in the demand, there would be no room for most of these adolescents. Society can use only a given number of doctors, lawyers, ministers, nurses, teachers, and so on. Although the needed number varies somewhat from one generation to another, it is a

safe guess that too many of these particular adolescents are trying to enter fields for which there will be no room, with resulting intense competition. On the other hand, there are a number of areas in which the supply would be woefully inadequate if all these adolescents were to enter the occupations of their choice. Not enough boys show an interest in trade and manufacturing, the deficit in skilled and semiskilled labor is even greater. The girls

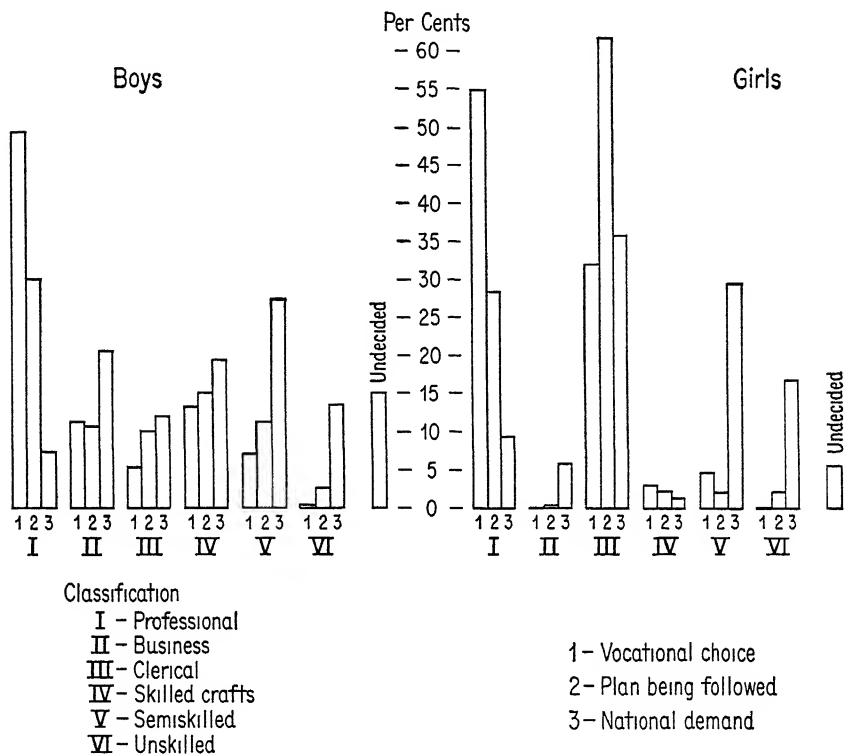


Fig 153 *Vocational Choice versus Vocational Opportunities*

Based on R. M. Stevenson, "Occupational Aspirations and Plans of 443 Ninth Graders," *Journal of Educational Research*, 49 27-35, 1955

are concentrated in two fields—professional and clerical work—with a few who plan to go into business. In all other lines there is a conspicuous lack of women workers. Although it does not appear in the chart as a separate item, far too few of these adolescents were planning to go into any kind of personal service. The world could use five times as many workers in this field as it can now find. Finally, about 15 per cent of the boys and 5 per cent of the girls had made no choice. Unless the distribution of intelligence in this entire group of boys and girls was most unusual, at least a third and

possibly more have selected an occupation that demands a higher degree of native ability than they possess. The situation shown above is typical of all such investigations, although the lack of relation between desire and opportunity is sometimes higher and sometimes lower than shown here

The Traditional Bases for Selection of an Occupation There are three traditional bases for the selection of a lifework following one's father, following familial ambitions, and following interest. The first two are sometimes the same and sometimes not. It is probably rash for parents to destine a child from birth to any one type of work, because they cannot know his potentialities, but by the time he is sixteen his parents may know him better than anyone else and can often therefore select a suitable line of work. Parents are not always wrong! One rather interesting investigation touched upon the relationship of the father's occupation to the work the son hoped for and the work he actually expected to do.⁶ Each boy in a union high school (165 cases) made out statements as to his grandfather's and father's occupations, and his own desired and expected jobs. The investigator first classified into a seven-point scale all male occupations reported in the census. He then tabulated the occupations of the pupils' grandfathers and fathers and both the desired and expected occupations of the boys. The grandfathers' work averaged at 3.6, the fathers' at 3.7, the boys' hoped-for occupation at 4.9, and their expected one at 4.0. That is, the boys would probably enter a line of work of a type similar to that of their immediate male ancestors, although they *hoped* for something a little better. In individual cases, however, the objectives were not so realistic. Some sons of fathers in groups 6 and 7 (professional men and business officials) wanted to enter work classified in groups 1 or 2 (unskilled or semi-skilled labor) while some sons of unskilled laborers wanted to enter the professions. Before one can venture an opinion on these cases one would have to know the individual. If one of the first boys mentioned above is the almost defective son of a business executive and one of the second group is the intelligent son of a Negro janitor, there is nothing basically wrong with their choices.

A second and more recent study reports the relation of boys' choices to the occupation of their fathers.⁷ The work done by the 8,000 fathers was first classed into ten groups. In five of the ten groups the sons tended strongly to follow in the same general type of work as that done by their fathers. Thus 71 per cent of boys whose fathers were skilled workmen planned to engage in some kind of skilled work, and 63 per cent of boys whose fathers were nonmanual workers were planning to enter nonmanual

⁶ F. M. Carp, "High School Boys Are Realistic about Occupations," *Occupations*, 28:97-99, 1949.

⁷ P. G. Jensen and W. K. Kirchner, "A National Answer to the Question 'Do Sons Follow Their Fathers' Occupation?'," *Journal of Applied Psychology*, 39:419-421, 1955.

occupations When the son intended to become something radically different from the father he tended to move upward in the occupational scale Sons follow their fathers most consistently in professional, managerial, and official jobs, and in the crafts.

The use of interest as a main basis for the selection of an occupation is a matter that has received much attention The first point to consider is the permanence of vocational interests If they are continually changing they are obviously unsuitable as bases for guidance The evidence is almost overwhelmingly in favor of the continuity of interests from adolescence to adulthood For instance, a survey made of an entire freshman class after nineteen years showed that 50 per cent of them did not change their main interest at all and that another 30 per cent were engaged in work that was closely allied to their interest nineteen years earlier⁸ In only 20 per cent of the cases was the present work unrelated In another study the relation was very high between what senior high school boys preferred, what they intended to do, and what they actually did⁹ In a third study, 69 per cent of the boys and 66 per cent of the girls showed identical interests after a lapse of two to four years¹⁰ Choices expressed by over 1,000 students in 1933 as freshmen and in 1937 by the same students as seniors were the same in 64 per cent of the cases, four years later, in 1941, 62 per cent still made the same choices they had made twice earlier¹¹ These various results indicate an adequate stability after about the middle of high school¹²

An interesting reflection of stability or its absence is shown by the profiles in Figure 154 High school girls and boys estimated twice or more their degree of interest in each of several occupations The extent of the variation from one year to the next indicates the stability of each pupil's interests The girls expressed their attitudes toward twelve possible vocations, the boys toward seven Girl A shows a quite consistent set of interests; she wants to be a doctor, but she has a secondary leaning toward teaching Girl B is also fairly consistent, but her major and minor interests in salesmanship and teaching change places in the two sets of results Girl C flatly

⁸ E K Strong, "Validity of Occupational Choice," *Educational and Psychological Measurement*, 13 110-121, 1953

⁹ J R Porter, "Predicting Vocational Plans of High School Senior Boys," *Personnel Guidance*, 33 215-218, 1954

¹⁰ K Taylor, "The Reliability and Permanence of Vocational Interests of Adolescents," *Journal of Experimental Education*, 11 81-87, 1942

¹¹ M I Wightwick, "Vocational Interest Patterns," *Teachers College Record*, 46 460-461, 1945

¹² For further studies, see P R Levine, and R Wallen, "Adolescent Vocational Interests and Later Occupations," *Journal of Applied Psychology*, 38 428-431, 1954, C McArthur, "Long-Term Validity of the Strong Interest Test on Two Subcultures," *Journal of Applied Psychology*, 38 346-353, 1954, C McArthur and L B Stevens, "The Validity of Expressed Interests as Compared with Inventoried Interests A Fourteen-Year Follow-Up," *Journal of Applied Psychology*, 39 184-189, 1955, E K Strong, "Permanence of Interests over Twenty-Two Years," *Journal of Applied Psychology*, 35 87-91, 1951

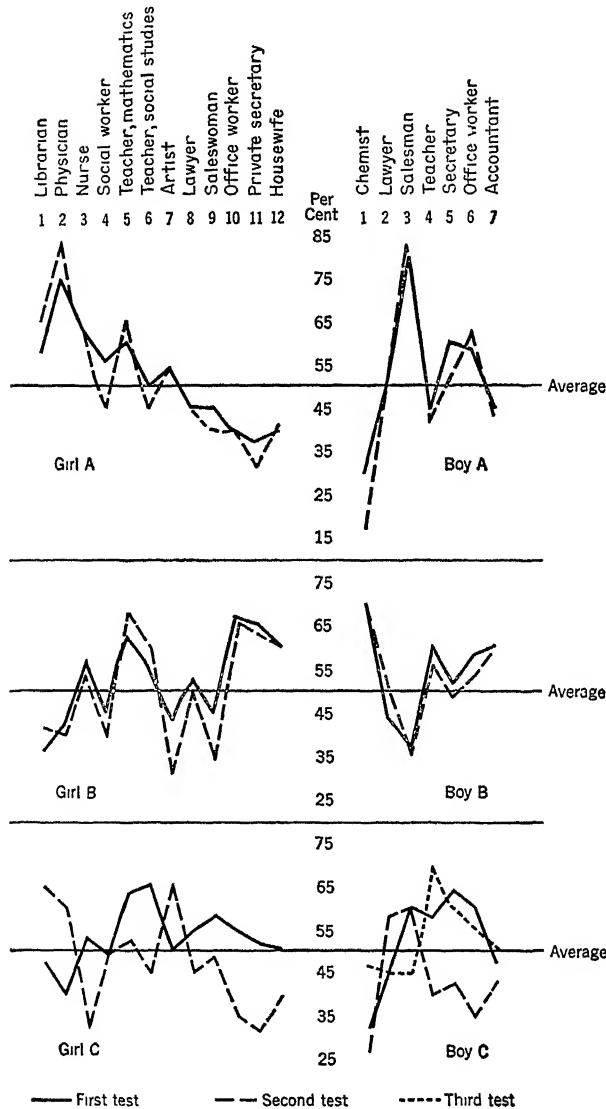


Fig 154 *Profiles of Vocational Interests*

From H D Carter, "The Development of Interest in Vocations," *Forty-third Yearbook of the National Society for the Study of Education*, 1944, Pt I, pp 262-266, 268 Used by permission of the publishers

contradicts herself on many of the ratings, she does not even know what she dislikes. Boy A shows a consistent desire to be a salesman, but he has some interest in office and secretarial work. Boy B wants to be a chemist, but he could be satisfied with teaching or working as an accountant. The

two measurements give quite similar ratings. Boy C recorded his interests three times, with widely different results. All one can be fairly sure of is that he does not want to be a chemist.

The second and crucial question about interests is whether or not they are trustworthy bases for guidance, even after they have become stable. That is, does a burning desire to be a doctor, for instance, have a fixed relation to general intelligence, special abilities, personality, or adequate preparation? The argument of those who accept interest as a main basis for selecting an occupation runs in this wise. If a boy wants to be a doctor, he will read everything about medicine that he can get his hands on, ask questions, find out what courses to take, and be so stimulated by his interest that he will do well in his work. Also, he will have the appropriate personality for a doctor, or he would not have been attracted by the profession in the first place. The results of many investigations have not supported this theory. Indeed, quite the reverse. There is either a low relation or none at all between interest and intelligence, interest and success, or interest and special skills.¹³ On the other hand, there is an appreciable relation between intelligence and success. In some instances, the coefficient of correlation between a measure of intelligence and marks in college courses has been somewhat raised by adding a measure of interest to that of intelligence, but the difference in prediction was not spectacular. There is also some relation between personality and interest, although this may be due to the fact that measures of interest are often used as subtests in measures of personality, on the assumption that a boy who wants to be a lens grinder has a different set of personal traits from the lad who wants to sell automobiles. Some degree of special ability is also often associated with interest. For instance, a boy who is interested in music probably has some kind of special ability, which may or may not have been developed, but the amount is not necessarily sufficient for his ambitions. One of the writers knew a young man of above average musical talents who wanted to enter the field of musicology, but he lacked absolute pitch, which is considered essential.

Measures of Fitness for Different Types of Work. Each occupation requires a typical constellation of traits, some of which may doubtless be acquired if interest is sufficient, but it is easier on the candidates for a type of work if they already possess the traits that they will need. Unfortunately, people are not logical. Many prefer to train themselves for some occupation that has caught their fancy, whether or not they have the neces-

¹³ R. G. Anderson, "Do Aptitudes Support Interests?" *Personnel Guidance*, 32 14-17, 1953, R. W. Edminston and W. Vordenberg, "Relationship between Interests and School Marks of College Freshmen," *School and Society*, 64 153-154, 1946, L. Long and J. D. Perry, "Academic Achievement in Engineering as Related to Selection Procedures and Interests," *Journal of Applied Psychology*, 37 468-471, 1953, L. G. Schmidt and J. W. M. Rothney, "Relationship of Primary Ability Scores and Occupational Choices," *Journal of Educational Research*, 47 637-640, 1954.

sary abilities, rather than enter a type of work for which their native equipment admirably fits them. If they are deficient enough, they fail at some quite early stage of their training, without much loss of time, but if they have a few of the needed traits they may stagger along for two or three years before they are eliminated and have to start over again. Some even complete the training after a fashion, but are never able to hold a job. Occasional waste and disappointment are probably unavoidable, people being what they are, but good counseling can at least decrease the amount

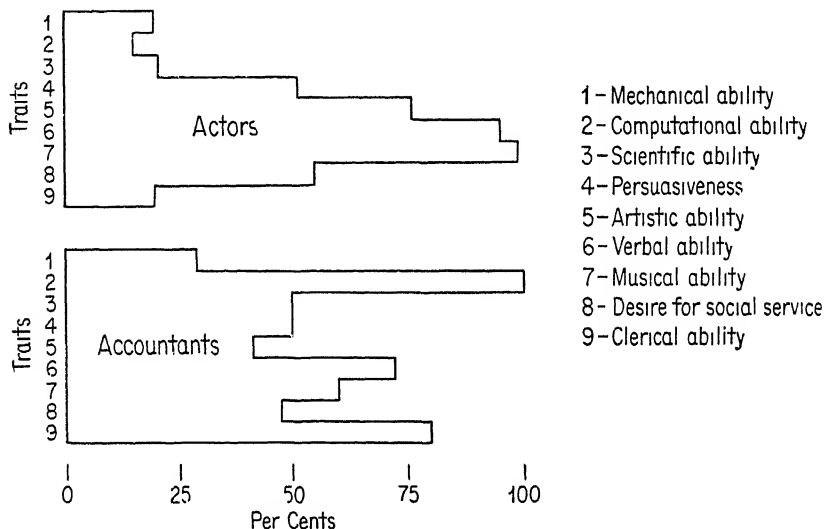


Fig. 155 Two Vocational Profiles

Based on G. F. Kuder, *Revised Manual for the Kuder Preference Record*, Science Research Associates, 1946

A common method of demonstrating what traits are needed for a given type of work consists in giving many tests to those who are already successful in a given field and in selecting those that correlate most highly with success. In the end, one makes a profile for each type of work. Usually, people in all fields have some amount of almost all traits, but the shape of the profile shows a prominence of two or three. Thus, the successful lawyer is gifted with an unusual degree of persuasiveness and of verbal ability, but he has only a moderate degree of interest in social service, he differs from the clergyman mainly in having greater persuasiveness and a less burning desire to help his fellow man. In Figure 155 are two profiles—one for actors and one for accountants. It is fairly clear that what the former need most, the latter need least.

The profile gives what might be regarded as an "ideal" constellation of traits for each line of work. It is used mainly by comparing it with the profile from the same tests for a pupil who wishes to enter a given occupation. In Figure 156 there are a profile for the teaching profession and two profiles for students who were freshmen in a teachers college. As may be seen, one student has an excellent set of abilities for teaching, while the other does not. What a teacher needs most is a high degree of reading skill, a large vocabulary, and an ability to handle words, a teacher needs also

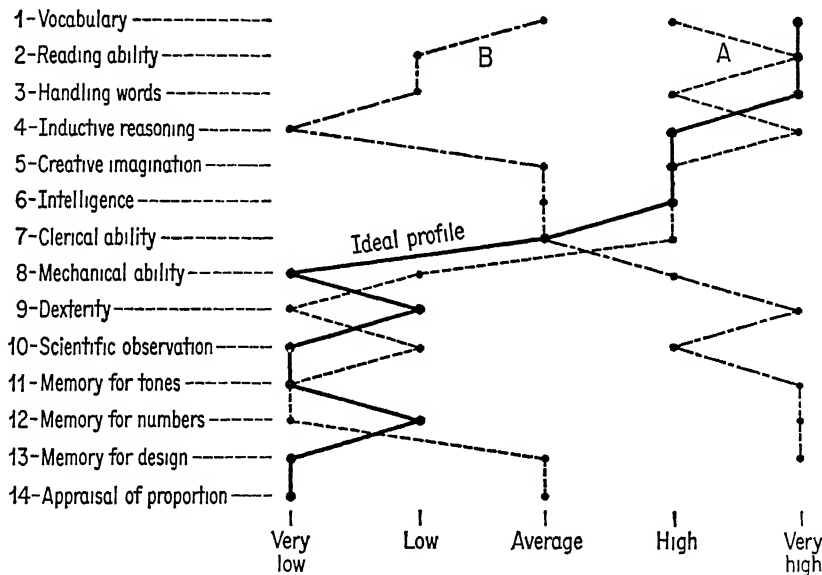


Fig 156 Comparison of an "Ideal" Profile and Profiles of Two Students

Based on figures in J. O'Connor, *The Unique Individual*, Human Engineering Laboratory, 1948, p. 13

a better than average creative imagination, ability to reason with abstract ideas, and a good general intelligence, average clerical skill is sufficient. The various other abilities on the list are not essential, although possession of them does no harm. If a teacher can bring musical or artistic skill to her work, so much the better, but she can be reasonably successful without these special capacities.

The Giving of Vocational Information. What the high school student needs most from the vocational office is information about occupations and about himself. The following section will discuss what information should be provided about jobs and about people if the facts are to help the adolescent.

Probably high school students most need some kind of over-all look at the vocational scene. An adolescent knows what work is done by his father, by various family friends, by neighbors, and by the fathers of his chums, but he may know little beyond the name of even these occupations, and certainly he has no conception of the vast array of existing vocations. The appropriate time for him to acquire this information is before he has crystallized his interests, he is too easily hypnotized by any exciting story he reads or any dramatic scene he witnesses in the movies or on television. The writers have an idea that a sporadic rash of movie scenes showing daring and successful surgical feats may account for an upswing of interest in surgery as a profession, especially among those adolescents who were entranced by the pictures for reasons having little to do with surgical details. That is, the excitement and satisfaction from the story were displaced to the occupation of the main character, especially if he were an idealized hero. If the adolescents knew that surgeons often refer to themselves as human plumbers, they might find less allurements in the work. One peril in the use of literature or drama for guidance is this displacement of emotional reaction from the story itself to the occupation of an admired character.

Table 58 shows a grouping of occupations which, while not perfect, at least brings in two dimensions that are useful. The fundamental grouping is in terms of interests: interest in physical activity, in service, in modern technology, in creative art, and so on. The occupations are thus grouped according to their appeal. Second, the specific jobs are listed according to level of responsibility. This arrangement, aside from its dependency upon personal traits, shows a young person who has to go to work early for financial reasons what kind of work may lead him upward in the scale of responsibility in a chosen area. It also suggests that there is far more need for supportive workers, and for those dealing with application or transmission than for inventive geniuses—that is, insofar as mere number is concerned. A young lad who has dreams of being a nuclear physicist and riding a space ship to the moon, but most certainly has not the ability to complete the necessary preparation, may be more willing to compromise on being an airplane mechanic if he sees that this work may eventually get him off the ground and into the air if not to the moon. The listing of occupations by the level of responsibility should also prove useful for those who do not feel themselves capable of leadership but wish to enter a given vocational field at some less responsible level. Thus, the girl who had idealized the work of a social worker—for which both writers can assure her that what she most needs is a pair of sound feet and a willingness to talk over the telephone—may find an outlet for her urge to help humanity in becoming a practical nurse or a deaconess. Any presentation that can make a possible second choice seem related to an impossible first one ought to help a counselor in guiding youth.

In one study¹⁴ students were asked to group some fifty occupations according to their own idea of which jobs had common characteristics. The results are presented not merely because they are of some interest in themselves, but mainly because they suggest a method of approach that might prove useful to others. Nine general clusters emerged from the students' work. They put together sundry professions as requiring ability, education, social skills, but not physical strength, and as being highly paid. Needing the same qualities but in lesser degree the students grouped businessmen and businesswomen. Under verbal skill as the main requirement they put secretaries, stenographers, bank clerks, and the like. Their fourth group, for which manual skill and strength were the main needs, included most of the crafts. The fifth and sixth groups were similar but these the students felt were on a lower level—one included farmers, truck drivers, and so on, and the other ditch diggers and other day laborers. The seventh group was based upon social skills mainly—salesmen, for instance. The eighth overlaps the sixth to some extent but involves less physical strength, it included unskilled labor, dish washing, cleaning, and so on. The last group was the "glamour" cluster of actors, models, airline stewardesses, firemen, and the like. These students did not do so badly, they paid more attention than some of their adult advisers do to the appeal of different kinds of work.

Vocational Satisfaction Satisfaction with one's work is the product of many factors. This phase of vocational guidance has received relatively little attention, but is of undoubted importance. Anyone works more efficiently and shifts his job less frequently if he is contented. Moreover, he wears out less quickly. There are many kinds of satisfaction, and they make appeals of varying intensity to different people. Much depends upon what one really wants out of life. If one desires security above all else, the well-paid job, even though monotonous, may be best. If one cannot tolerate the touch of overhead control, then freedom becomes the desideratum. A few of the common motivations and satisfactions are listed in Table 59. These particular results are for men and women teachers and factory workers. At a glance, one can see that there are many more satisfactions of some kind from teaching than from being a factory worker. In fact, the main motive in the latter is the pay, why a fifth of the factory workers voted for self-expression remains baffling to the writers. The main satisfactions in teaching seem to be self-expression, status, and social contacts. The men think more of the financial returns, probably because they are more highly paid, and they find more variety in their work, possibly because more of them are heads of departments. Why so few women teachers voted for help to others as a form of satisfaction remains another mystery, usually this feature rates high both as a motive for selecting teaching for a lifework and as a satisfaction derived from it.

¹⁴ W. F. Grunes, "On Perception of Occupations," *Personnel Guidance Journal*, 34: 276-279, 1956.

Table 58 TWO-WAY

Level	Group		
	I Service	II Business Contact	III Organization
1 Professional and Managerial Independent Responsibility	Personal therapists Social work supervisors Counselors	Promoters	United States President and Cabinet officers Industrial tycoons International bankers
2 Professional and Managerial, 2	Social workers Occupational therapists Probation, truant officers (with training)	Promoters Public relations counselors	Certified public accountants Business and government executives Union officials Brokers, average
3 Semiprofessional and Small Business	YMCA officials Detectives, police sergeants Welfare workers City inspectors	Salesmen auto, bond, insurance, etc Dealers, retail and wholesale Confidence men	Accountants, average Employment managers Owners, catering, dry-cleaning, etc
4 Skilled	Barbers Chefs Practical nurses Policemen	Auctioneers Buyers (DOT I) House canvassers Interviewers, poll	Cashiers Clerks, credit, express, etc Foremen, warehouse Salesclerks
5 Semiskilled	Taxi drivers General houseworkers Waters City firemen	Peddlers	Clerks, file, stock, etc Notaries Runners Typists
6 Unskilled	Chambermaids Hospital attendants Elevator operators Watchmen		Messenger boys

From Anne Roe, *Psychology of Occupations* New York John Wiley & Sons, Inc.,

CLASSIFICATION OF OCCUPATIONS

Group				
IV Technology	V Outdoor	VI Science	VII General Cultural	VIII Arts and Entertainment
Inventive geniuses Consulting or chief engineers Ships' com- manders	Consulting specialists	Research scientists University, college faculties Medical specialists Museum curators	Supreme Court Justices University, col- lege faculties Prophets Scholars	Creative artists Performers, great Teachers, univer- sity equivalent Museum curators
Applied scientists Factory man- agers Ships' officers Engineers	Applied scientists Landowners and operators, large Landscape archi- tects	Scientists, semi- independent Nurses Pharmacists Veterinarians	Editors Teachers, high school and elementary	Athletes Art critics Designers Music arrangers
Aviators Contractors Foremen (DOT I) Radio operators	County agents Farm owners Forest rangers Fish, game wardens	Technicians, medical, X-ray, museum Weather observers Chiropractors	Justices of the Peace Radio announcers Reporters Librarians	Ad writers Designers Interior decorators Showmen
Blacksmiths Electricians Foremen (DOT II) Mechanics, average	Laboratory testers, dairy products, etc Miners Oil well drillers	Technical assist- ants	Law clerks	Advertising artists Decorators, window, etc Photographers Racing car drivers
Bulldozer operators Deliverymen Smelter workers Truck drivers	Gardeners Farm tenants Teamsters, cow- punchers Miner's helpers	Veterinary hos- pital attendants		Illustrators, greet- ing cards Showcard writers Stagehands
Helpers Laborers Wrappers Yardmen	Dairy hands Farm laborers Lumberjacks	Nontechnical helpers in scientific organization		

Table 59 JOB SATISFACTION

	Per Cent Marking Each Source of Satisfaction		
	Women Teachers	Men Teachers	Factory Workers
1 Self-expression	25	61	19
2 Status in community	37	51	9
3 Association with people	28	52	0
4 Money and security	9	47	30
5 Variety	8	13	7
6 Helping others	7	17	2

Based on J. L. Norton, "General Motives and Influences in Vocational Choice," *Journal of Genetic Psychology*, 82 235-262, 1953

In one study workers in several fields were asked to express their satisfaction with several different phases of their employment. A few sample results appear in Figure 157. Dissatisfaction with pay, with opportunities

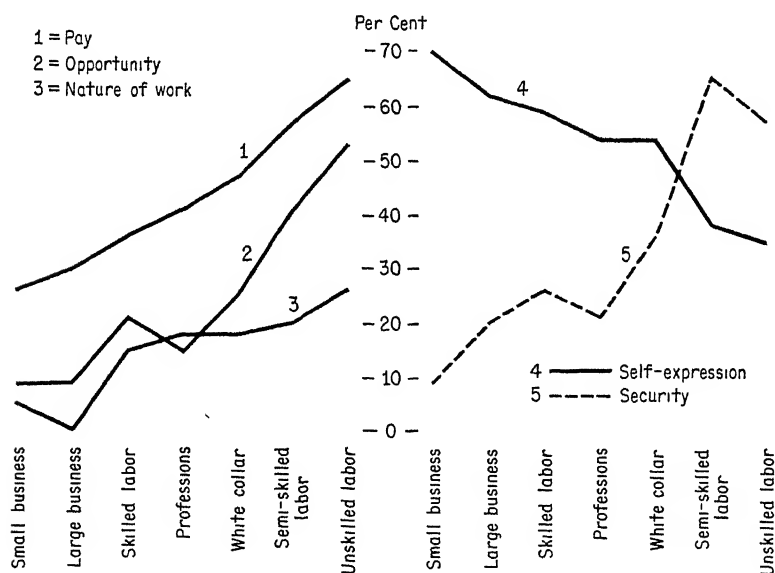


Fig 157 Dissatisfaction, Self-Expression, and Security

Based on R. Centers, "Motivational Aspects of Occupational Stratification," *Journal of Social Psychology*, 28 198-211, 1948

for advancement, and with the general nature of their work was lowest among businessmen and skilled laborers, average in the professions and among office workers, and highest among semiskilled and unskilled laborers. The workers also estimated the degree of self-expression and security in

their jobs. The results suggest that one cannot hope for both these features. The more opportunity there was for self-expression, the less the feeling of security, and vice versa. This relationship might well be brought to the attention of young people as one factor to be considered in the selection of an occupation.

The high school population must furnish the individuals who will in the next generation occupy every kind of job above the level of the day laborer, who is recruited mostly from those who do not reach high school, therefore any consideration of occupations should stress equally and without prejudice the entire range of jobs into which high school students will go. It is essential that work of all types should be presented and that no work at any level should be labeled, openly or by implication, as being menial or unworthy. The work of the world has to be done, and it will be much better done if every worker is proud of his work. The desirable attitude toward one's work, no matter what it is, is shown in the following brief accounts.

Mr. H. is almost an institution in the small city where he lives. As nearly as his occupation could be classified, he would be called a "handy man." He mows lawns, weeds gardens, and washes windows in the summer, in the winter he fixes electrical gadgets that refuse to work, tends the furnaces, and shovels snow. In addition to these routine activities, he builds almost anything from a birdhouse to a bookcase, or from a flagstone walk to a brick wall. His work is not especially ingenious, but it is well done. He tends to minutiae with loving care, measures from all angles, planes and sandpapers each board before using it, and spends hours in getting each detail exactly right. The remarkable thing about Mr. H. is not, however, his workmanship but his pride in each thing he finishes. If it is portable, he carries it around the neighborhood and shows it to families for whom he works. If it is not portable, he persuades his numerous employers to come and see what he has done. He does not want to be praised or complimented, what he wants is to have others enjoy the perfection of the thing he has built. He once escorted one of the writers for a distance of six blocks to show her three brick steps he had built to replace some wooden ones that had fallen into decay. The point he wanted admired was the absolute evenness and straightness of the steps from any angle whatever, the fact that he had made them was not as important as the accuracy of the work. Throughout one section of the city there are lawns Mr. H. has planted and tended, garages he has built or rebuilt, roofs he has shingled, shrubs he has transplanted, fences he has put up, and houses he has painted. His progress through the neighborhood is rather deliberate, because he stops in front of every fourth or fifth house to enjoy the fruits of his labors. Mr. H. is neither conceited nor boastful, he has only an honest pride in simple work that is carefully done. In his humble way he has left more of an imprint upon the life of the community than many a man of more spectacular talents.

Not long ago it occurred suddenly to one of the writers that the same amiable colored man has been collecting the trash for at least five years, so, knowing the

usual rapid turnover of workers in such an unskilled field, she asked the man if he liked his work. His reply was a little homily upon how to find satisfaction in the humblest role. He had something to say about such drawbacks as the inconsiderateness of certain householders and about the heavy loads he sometimes had to carry, but he was quite clear about the value of his work. He described the Negro quarter in a southern town where he had grown up and how littered and unattractive it became because it had no routine disposal of trash and garbage. He explained how the latter was now used to make fertilizer and what some of this product had done for his garden. He expatiated upon how the cleanliness and health of the city depended in some measure upon the work he and his associates did. He said he enjoyed looking at the neat, tidy houses in this neighborhood and thinking how much of their neatness was due to him, and he hinted what a mess they would be in if he were to stop his work. Then he explained how the trash was used as the basis of new land and described two or three "made" tracts where there was once only marshy waste but where now attractive homes stand and happy children play. He wound up his little sermon by saying "Those little children don't know, of course, how much they owe to me and the others like me, but I know." This man is illiterate—it does no good to leave a note for him because he cannot read it—but in his philosophy of life he is the superior of many highly educated professors.

Mr. S. is known in the city where he works simply as the "bugman." It is doubtful if many of the people who send for him when ants, termites, fleas, or other undesirable guests invade their houses know him by any other name. The distinguishing thing about him is not his efficiency in routing the pests, but his delight in his success. There is more joy in his heart over the wresting of one oldish wooden house from the termites than over the rescue of twenty new cement houses. There is little that he does not know about insects and their habits, and he is a tireless worker in saving the world from being eaten alive by them. His cheerfulness and enthusiasm are neither sales patter nor surface mannerisms, they are as real as the excitement of an etymologist who has just traced an obscure word root through six languages. In his spare time the bugman devises new and ingenious ways of outmaneuvering the insect world. Mr. S. is fundamentally a crusader, and both his interests and his conversation are somewhat cramped by his crusader's zeal, but there is no question about either the good he does or the pride with which he regards the results of his efforts.

These cases are isolated examples of an attitude that is an essential characteristic of every well-adjusted worker. Pride in a good piece of work, a constructive sense of achievement, and an enjoyment of one's labor should not be regarded as the private possessions of the highly literate. Teachers can help in a better adjustment of pupils to their adult work if they drive in this attitude about the dignity of all labor, provided the work is well done.

Practical Value of Vocational Guidance and Selection Obviously, the vocational program is successful if students generally enter occupations in which most of them are reasonably happy and successful. A really adequate estimate of success would require a long-time study in which one

followed the careers of two large groups of adults, one of which had had adequate guidance in high school while the other had not. Some such studies are already in progress but have not yet run quite long enough for more than tentative results. In the meantime, one can glean some information as to the value of testing and guidance in actual job placement through accounts of such an approach in various fields, of which two have been chosen as typical—the selection of policemen and of army personnel.¹⁵

All applicants for police work in one large city were tested with a temperament scale, which correlated with the appraisal of success on the job with a coefficient of 0.72. Of the original 621 applicants, 233 were discharged and 79 resigned. Only 2 per cent of the discharged men made high scores on the scale, 26 per cent made average scores, and 72 per cent made low or very low scores. The corresponding percentages for the 79 who resigned were 11, 39, and 50. The second report dealt with the success of placement by various tests of the women in one of the English military services.¹⁶ The follow-up of the personnel showed a sufficient degree of satisfaction and efficiency to permit continuance of the work in 95 per cent of the cases. One cannot say what the proportion would have been without the test selection, but one suspects it would have been appreciably lower.

Perhaps the most convincing proof of the value of guidance is still the success of the individual case. The three studies that follow tell the histories of three misfits. Such stories almost always involve misfits, since they are the ones who ask for help and for whom a case study exists. One of these three was of low intelligence, one was quite introverted, and a third was a victim of well-intentioned parental misguidance.

Edna was a high school junior who came voluntarily to the counselor to ask for advice about possible vocations. She felt that her mother's ambitions for her were hardly appropriate, but she didn't like to go against her mother's wishes. It then developed that Edna had some artistic talent. She had taken art courses, in which she had done well enough, but her teachers rated her as having good technique and an unusually rapid rate of work but as being utterly without imagination or perception or appreciation. Her pictures, in their estimation, were nearly as accurate as colored photographs, but they "said" nothing. Edna herself was a modest, somewhat withdrawn adolescent, whose social contacts were few. Her intelligence was good, but in all her work she lacked initiative or inventiveness. She merely reproduced what she had heard or read, without additions or opinions. Her mother had evidently assumed that the girl's artistic ability was of the highest order, because she could draw so accurately. The mother was a widow who supported herself and her daughter by practical nursing. For her daughter she

¹⁵ D. G. Humm and K. A. Humm, "The Humm-Wadsworth Temperament Scale Appraisals Compared with Criteria of Job Success in the Los Angeles Police Department," *Journal of Psychology*, 30 63-75, 1950.

¹⁶ M. Wickham, "Follow-Up of Personnel Selection in the ATS," *Occupational Psychology*, 23 153-169, 1949.

wanted "something better" Edna herself dimly realized that her work lacked something, but she was not clear as to just what, and she was wondering if she should not follow in her mother's steps and go into nursing, perhaps taking a degree and entering the profession at a higher level Upon questioning, it appeared that she had already made contacts with a hospital through the services of an old friend of her father's, a successful surgeon, who had arranged for her to watch several operations She had been enchanted, but she did not know how the news could be broken to her mother It happened that the counselor knew of a surgeon who was looking far and near for an illustrator to draw diagrams and illustrations for a book he was writing Some of the work would have to be done on the spot, with the artist peering over the surgeon's shoulder—and trying to keep out of the way of essential personnel For this work Edna seemed ideal She drew fast, she drew accurately, she added nothing, she changed nothing In the course of the next five years Edna finished high school by taking evening courses, for she was much too busy making illustrations, copying slides, and peering through microscopes to attend school in the daytime She has found precisely the job for which she is fitted, and she rejoices in every accurately colored cross section of cancer tissue, and in every detailed drawing of an incision Her visit to the counselor has paid off a hundredfold

Hazel was a quiet, serious girl who had a good record in the elementary grades and an average record in high school Over the years she had taken five group tests of intelligence and had scored between the median and the seventy-fifth percentile on all of them She had never been in disciplinary difficulties Her teachers reported her as being too withdrawn and too quiet Efforts to interest her in various activities had not been especially effective, although she seemed to get some enjoyment out of her leather-working club and out of singing in the school chorus As a sophomore in high school, Hazel came voluntarily to the guidance office because she lacked adequate self-confidence Subsequent interviews revealed a home situation that accounted in large measure for Hazel's reticence Her parents were both repressed people who rejected with horror any show of emotion They were never affectionate with her or with each other They were both sensitive to social approval and determined to be decorous and correct at all costs Hazel learned at an early age to be quiet, reserved, industrious, sober, conscientious, and conventional, since such behavior met with approval She had accepted her parents' standards and had molded herself accordingly

With assistance the girl managed to develop a moderate degree of self-confidence in her schoolwork and to obtain better marks, but she continued to be abnormally quiet and self-effacing in social relationships, although the number of her social contacts was increased by membership in two more school clubs In her junior year Hazel began to think about what kind of work she could do after leaving school She had no desire to go on to college, and her counselor felt that the girl's abilities, though average, were not high enough to compensate for her negative personality and that she would not be successful in college In talking with Hazel about the matter it became evident that Hazel wanted work that had two characteristics—permanency and monotony She disliked change of any kind—even a change to something better—and she wanted the support of routine to bolster

her courage. She was therefore advised to elect courses in office routine. After a little training Hazel decided she would like to be a filing clerk or some kind of record keeper. She felt that such work was within her capacities and that she could perform her duties without strain. At first the counselor was inclined to think that Hazel had more ability than was needed for such simple work and would therefore soon become discontented and bored, but eventually she realized that the girl needed security above everything else and that she would be happy only in work that was far below her capacity and would not frighten her. The counselor therefore encouraged Hazel to take such further training as she needed for obtaining a clerical position. After graduation from high school Hazel went to work as a filing clerk in the records room of a large hospital. She liked the work from the first day, and she liked the courtesy with which she was treated. She has remained in the records office of the same hospital for four years now and is still contented and does not want to change her job.

Earl S. was a freshman in engineering who had just failed both mathematics and mechanical drawing. By contrast, his work in English had been outstandingly good. When Earl first talked with the counselor he refused to so much as consider changing from engineering into some other course of study. He refused to take any aptitude tests although the counselor suggested that the results might be useful to him. He was quite unable to accept the idea that he might actually need help.

About a week before the end of the following semester Earl returned to the counselor in a state bordering upon panic. It appeared that he was now failing everything, even his English. Gradually Earl was able to bring out the main outlines of his difficulties. He had always done well in linguistic studies and badly in both mathematics and science. He was, however, convinced that he "ought" to take things that were hard for him in order to improve his mind. He had entered engineering at the urging of his father, who had always regretted that he had not taken an engineering course. Earl had a great admiration for his father but at the same time stood somewhat in awe of him, and he did not see how he could face him after the complete failure of his second semester's work. The counselor tried to talk the lad into a more cheerful mood and managed to relieve his worst apprehensions by offering to break the news to the father and to discuss with him a possible future for Earl, now that the engineering school was about to dismiss him. The father turned out to be a man who was deeply devoted to his son, but he was an extroverted, overactive, talkative individual who expressed his own ideas so continually that he never did learn what other people thought or felt. He was genuinely surprised to discover that Earl did not like engineering. Apparently it had never crossed his mind that his son was not merely a younger edition of himself. It was also clear to the counselor that all the talk about the fascination of engineering was merely an outlet for the father whenever he happened to be bored with his work as a lawyer—an occupation to which he was far better adapted than to engineering. As a fantasy it did no harm, but when he tried to influence his son into living out his own fantasy, the trouble began. The man was bright enough to see the situation and perfectly willing to take the major blame for his son's academic maladjustment. His devotion seemed genuine, and he did not even resent the advice to talk less and listen more!

The following year Earl transferred to a small arts college, where he majored in English literature. Since his early failure in engineering seemed still to rankle a bit, he returned to the university from which he had been dismissed and took his Ph.D. there, doing most of his work in Old English. Earl is now a professor in a small college, and his father is extremely proud of him.

Summary

Personnel work in the high schools has become a permanent part of the services rendered to students. Each year more schools introduce counseling, and the many that already have it expand the activities of the counselors. Recent years have seen a decided trend toward the student-centered type of counseling, which merely guides the student's own thinking and helps him to find a solution to his problems after he has identified them. The main problems center around the selection of courses, the selection of a vocation, and the attainment of a good social adjustment, but many others appear from time to time.

The selection of a vocation is a matter of vital importance to the adolescent because of the influence it will have upon his future. Adolescents often concentrate upon a comparatively few occupations, without much respect to either the demands of the work or their own abilities to meet the requirements. They need therefore to be guided, not so much by advice as by information. Boys and girls should, of course, take their interests into consideration as one element in the situation, but they need to see that interest is not the only factor. At entrance to high school many young adolescents still have glamorous notions about the work they want to do, and they need help in outgrowing these childish attitudes. Many adolescents come to the counselor's office voluntarily to obtain an appraisal of themselves so that they may know what their strong and weak points are. This development is highly desirable, since the students come in a frame of mind that permits the most valuable types of guidance.

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The High School Curriculum

Since the high school is a public institution, it should serve the needs of all the adolescents who attend it. It must concern itself with social adjustment, growth of personality, development of moral attitudes, vocational choice, and physical development, as well as with mastery of academic subjects. Some of these points have been discussed in other chapters, but there remain a few topics that require further consideration.

The secondary school curriculum in the United States has a fairly long history, dating from the early eighteenth century. Certain of the elements still contained in it and certain of the attitudes toward it are survivals of an earlier day. It therefore seems desirable to begin the present chapter with a brief summary of developments in the American secondary school. Various investigators have stressed the need for a general reorganization of the high school curriculum. The curricular offerings—both required and elective—of the high school will therefore be discussed in a second section. If a high school is to serve the needs of youth, it must offer an appropriate course of study and teach it by methods that stimulate growth and mastery.

Growth of the High School Curriculum

The curriculum of secondary education in America was borrowed originally from the schools of England. This model was aristocratic, cloistered, humanistic, disciplinary, and masculine. The training given was intended for a selected group of boys, who were to be molded into gentlemen. Girls were given smaller doses of the same course of study, without respect to its appropriateness for them. The studies were strongly humanistic, that is, the heaviest concentration of work was in Greek and Latin. The school was not supposed to be closely related to life or to contribute directly to an understanding of the practical world. The boys led a cloistered existence for several years, during which their minds were supposed to be disciplined by their study of ancient languages and mathematics. This curriculum was transplanted to American soil, where it grew and changed

only slowly up until the time of the Revolution. After that upheaval the desire to break away from everything English led to some modifications, but the main changes were at the elementary level. The country already knew what kind of basic education it wanted, but it was not yet ready to develop a secondary school especially adapted to its needs. The English model for secondary schools, plus some accretions from German secondary education, lingered on into modern times, in spite of its inappropriateness to the American way of life. It was not, indeed, until the very end of the nineteenth century that the high school began to be "Americanized" into the unique institution it is today.

During most of the nineteenth century the curriculum of the secondary school consisted of Latin, Greek, algebra, geometry, rhetoric, a little history, a little elementary work in the physical sciences, and sometimes German or French—subjects demanded as a basis for the education of a scholar and a gentleman. They still remain subjects that are necessary for a scholar, but they are not and never were intended as subjects for the average adolescent boy or girl.

The curriculum originally imported from England may or may not have been appropriate for a highly selected group of English adolescents, but it soon proved undesirable for the larger and more heterogeneous groups that even from the first attended the American secondary school. By the middle of the nineteenth century there was much criticism of the schools, but reform came slowly and in the main only after the rising enrollments had emphasized the situation. After some minor adaptations, three liberalizing developments took place during the decade between 1910 and 1920: different courses of instruction were introduced—college preparatory, scientific, vocational, and commercial, a small number of vocational and industrial classes made their appearance, and pupils were allowed to take a few electives. From about 1910 on, new courses began to appear, and the idea of relatively wide election rather than routine prescription gained wide acceptance. Table 60 presents a quite "radical" course of study for the year 1914—a dividing point that marked the end of one cultural period and the beginning of another. The entire list of courses for all years would have occupied too much space, hence only the freshman and senior years are quoted.

English was required in every course in every year, although the assignments presumably varied somewhat from one class to another. In the senior year, a course in American history and civics and one in vocations were also required. The electives within each course consisted chiefly of the required subjects from other courses. Students in the classical subjects could branch out into history, modern languages, or a little science, while those in the scientific course could lean toward either the classics or the manual arts. In the four vocational courses, the students might elect either technical or semitechnical classes from other vocations or a smattering of modern lan-

Table 60 A LIBERAL CURRICULUM IN 1914

<i>Classical</i>	<i>Scientific</i>	<i>Commercial</i>	<i>Manual Arts</i>	<i>Agriculture</i>	<i>Home Economics</i>
<i>First Year</i>					
<i>Required</i> English Algebra	English Algebra Physical geography Commercial geography	English Physical geography Commercial geography Spelling and word analysis Penmanship	English Commercial arithmetic Mechanical drawing Manual training	English Physical geography Commercial geography Agriculture Soils Breeds of livestock	English Elementary cooking Cleaning Handwork Physiology and hygiene
<i>Elective</i> Ancient history Physical geography Commercial geography	Latin German Ancient history Manual training Domestic science	Algebra Ancient history German	Algebra Physical geography Commercial geography Ancient history German	Algebra Commercial arithmetic Manual training Domestic science	Algebra Physical geography Commercial geography Ancient history German
<i>Fourth Year</i>					
<i>Required</i> English American history and civics Vocational direction Virgil	English American history and civics Vocational direction Physics	English American history and civics Vocational direction	English American history and civics Vocational direction Architectural drafting	English American history and civics Vocational direction Feeds Farm management Insect pests Fungus diseases Farm law	English American history and civics Vocational direction Dressmaking Millinery
<i>Elective</i> German French Trigonometry Political economy Psychology Principles of teaching Physics	French Trigonometry Political economy Psychology Principles of teaching	French Physics Chemistry History of commerce Advertising and sales- manship Stenography Typewriting	French Physics Trigonometry Agriculture	Physics Breeding Farm surveying Marketing farm prod- ucts Manual training Domestic science	French Physics Psychology Home sanitation Home planning

From J. E. Stout, *The High School Its Function, Organization and Administration*, D. C. Heath & Company, 1914, pp. 305, 309, 311. Used by permission of the publisher. See also J. E. Stout, "The Development of High School Curricula in the North Central States, 1860-1918," *University of Chicago Supplementary Education Monographs*, no. 15, 1921, and G. E. Van Dyke, "Trends in the Development of High School Offerings I and II," *School Review*, 39 657-664, 737-747, 1931.

guage, history, or mathematics. This curriculum was, in its day, considered somewhat too radical, but the student of 1959 would certainly find it cramping, unstimulating, and unrelated to life.

As soon as differentiation and liberalization were accepted as basic principles in the preparation of a curriculum, many new courses were introduced, usually as electives but sometimes as requirements in one or two courses of study and elective in others. A few classes, such as moral philosophy or natural science, were dropped because they were either overdifficult or outdated, in name at least. In 1906 a group of typical schools offered an average of 24 subjects and a total of 53 different courses, in 1930, the average in the same schools had risen to 48 and the total to 306. The most frequent arrangement was for all courses of study to have a small, common core—usually English, history, or science, in different years—plus a few units of required work each semester for those in each course, with the remaining hours to be chosen from an array of electives. The new classes that were introduced during the period from 1900 to 1920 were of five types: further subdivisions or extensions of traditional subject matter, new material drawn from the growing social sciences, additions of a vocational and utilitarian nature, classes in the appreciation of music and art, and expanded work in physical education. As will shortly appear, these sundry additions represent variant points of view as to what is desirable in a high school curriculum.

As a result of the onslaught of students just after and since World War I, the high school curriculum sprang new leaks that were plugged up as well as seemed possible with a variety of temporary corks, but it was soon clear that the curriculum needed a thorough re-evaluation in terms of modern objectives, a complete overhauling of courses, and the establishment of a much closer relationship between what was taught and the characteristics of both the learner and the environment in which he lived. The overhauling is still in progress, and shows no sign of stopping, since the basis of the modern curriculum is its relation to life—and life refuses to stand still.

Indeed, the events of the last decade have posed new problems for the makers of the high school curriculum. The bomb that fell on Hiroshima is still echoing down the halls of learning, 1945, like 1914, began a new period of history. The education that was appropriate before the atomic age is already not entirely suitable for today's adolescents. In the last year, the appearance of Sputnik underlined the need for certain curricular changes. In a less dramatic way, the beginnings of automation have also delivered a warning. Two trends have already become observable: a need for greater emphasis upon science and the necessity for a thorough mastery of the "old-fashioned" high school subjects, because education in scientific fields has to have a firm foundation. Lads who would have avoided algebra a decade ago are now taking it, for instance. This trend to better mastery of subject matter has already collided with the inescapable fact that a considerable

percentage of the high school population cannot achieve mastery of such subject matter. What the solution will be remains for the future. In any case, there is never an end to curricular research and planning.

It is, however, already plain that the curriculum of today and tomorrow is going to be highly social in its aims and highly psychological in its methods. It will try to develop the "whole" adolescent, just as, a few decades ago, the elementary school curriculum became dedicated to developing the "whole" child. It will try to bring about an adaptation of each pupil to the increasingly demanding society in which he must live, and it will draw its materials from the daily life of the world.

It seems worth while at this point to quote a few typical summaries of what educators think about the proper curriculum for present-day youth. One report characterizes certain necessary features of the modern curriculum in the following way¹. It should be so designed and so administered that it is an excellent illustration of democratic living. That is, it should serve as many pupils as possible as well as possible, it should be the result of a co-operative effort of all whom it affects, and it should express the will of the majority. It should also help the student to formulate a social philosophy for his own guidance. It should emphasize the study of contemporary life, especially as it affects youth. It should provide adequate training in health. It should furnish opportunity for improvement in the skills that are necessary for participation in a democracy. And it should include guidance, both personal and vocational, for all students. Teachers might find it illuminating to check the curriculum of their school against these criteria.

Another typical investigation into the curricular offerings of a single school as related to the characteristics of the student population, the nature of student activities and attitudes, the stated objectives of the school, and the characteristics both of the community in which the school was situated and of modern society as a whole concludes with the following statements: that the survival of the democratic society depends upon the development of a school curriculum and procedure that are appropriate to the best social, personal, and intellectual development of adolescents, that the present curricula of secondary education consist mainly of traditional subject matter taught with the object of training the mind, and that the content and methods of education need not only to be brought into line with modern knowledge but also to be more closely related than at present both to the characteristics and needs of adolescents and to the requirements of modern living².

The central issue of the high school curriculum is not that of gaining

¹ V. E. Herrick and R. W. Tyler, "Toward Improved Curricular Theory," *Supplementary Educational Monographs*, University of Chicago, no. 71, 1950, 124 pp.

² W. H. Quins, W. H. Fox, and D. Segel, "A Study of a Secondary School Program in the Light of the Characteristics and Needs of Youth," *Bulletin of the School of Education*, Indiana University (no. 6), 25:1-69, 1949.

or losing a proper balance between the sciences and the humanities, but one of being sufficiently bold, imaginative, and energetic to make the curricular reforms in all fields of knowledge which will ensure to each growing young American an education both broad and deep. It is an issue as to whether we can bring the university academic specialists into serious, sustained collaboration with those who work in the United States, to select that knowledge that is of most worth, to discard what is useless, inaccurate, and obsolete, and to develop new curricular materials in a usable form, and finally it is an issue of seeing that the high school teacher is enabled to keep abreast of new knowledge and to use her competence to the maximum in putting a revised curriculum into operation.³

Basically education is a life-long learning process involving all-around development accompanied by adjustments within oneself to things, circumstances, and people. Intrinsic self-adjustment and extrinsic social adjustment are both concomitants of healthy growth. Educators must be concerned with the direction in which such development should be kept moving, and the ultimate goals toward which it should be directed. In the final analysis, the objectives of education are determined by the very nature of man himself. These objectives, when implemented by a functioning curriculum, become a program of social action.⁴

One can see that the underlying philosophy of secondary education has changed markedly. Whether for better or for worse depends upon one's point of view, but in any event the changes are here to stay. The clock runs in only one direction.

The Various Theoretical Bases of the Curriculum Any high school offers courses that are reflections of numerous attitudes on the part of past administrators as well as of circumstances. The most obvious of these are the size and the financial support of the school. A high school with no more than fifty pupils can offer only one main course of study because its teaching staff of perhaps four or five teachers will be inadequate for anything more. Such a school does not have the funds with which to install equipment for certain types of vocational training or for laboratory work. These limitations are mainly responsible for the appearance of consolidated or union high schools, each serving a district that previously would have supported a half-dozen smaller schools.

In addition to these practical considerations, certain well-established points of view have exerted great influence upon the growth of the curriculum. First in historical sequence comes the theory that high school courses should prepare students for college. For those who go on to college this pre-

³ T. C. Venable, "Patterns of Secondary School Curriculum," *California Journal of Secondary Education*, 33:196-199, 1958.

⁴ C. A. De Young, *Introduction to American Public Education*, McGraw-Hill Book Company, 3d ed., 1955, p. 408.

paratory function is still vital. The concepts and skills learned in algebra, geometry, English composition, and elementary work in languages, history, and science are the tools of scholarship without them one can be a respectable, useful, God-fearing, honest citizen and workman, but one *cannot* be a scholar. Objections arise therefore only when the preparatory function is applied to the wrong pupils. Not more than 50 per cent of high school graduates enter college, of whom considerably less than half will graduate. For half of the students the years in secondary school mark the end of formal schooling, and for them the traditional subjects are irrelevant, since they lead the learner into paths that at least two thirds of the freshmen in grade 9 have neither desire nor ability to enter.

A second theory instrumental in forming and sustaining the traditional curriculum was the concept of mental discipline—the idea of training the mind by means of proper mental exercises just as one trains the body. In the words of a modern exponent of this point of view, “An intellect properly disciplined, an intellect properly habituated is an intellect able to operate well in any field. An education that consists of the cultivation of intellectual virtues therefore is the most useful education, whether the student is destined for a life of contemplation or a life of action.”⁵

For many decades, Latin and geometry were thought of as subjects that would teach the pupil to memorize quickly, to reason accurately, and to think closely, thus producing mental powers that could be directed against any new problem. If this assumption were only true, education could be greatly simplified! One would need only to determine which courses gave the greatest mental discipline and then require all pupils to take them. The content, since it would be merely for purposes of exercise, would not need to be relevant to anything. Unfortunately, no such short cut exists. Modern experimentation has shown that those who study geometry surpass others of equal intelligence who do not study the subject only in their ability to reason in geometry, but not in their capacity to think out problems involving data drawn from chemistry, politics, literature, aesthetics, or any other field of thought that impinges little upon geometry. The students of any given subject do learn how to reason within their subject, and they do acquire skills and ideas which can be transferred to other subjects. What they do not get is an ability to think that transcends the data by means of which it has been nourished. Courses cannot therefore be included in a curriculum merely as sources of mental discipline, because all courses give a certain amount of discipline so far as the data studied are concerned, all provide facts and skills that can be transferred to other schoolwork and to life outside school, all provide more or less training in habits of study or techniques of thought and procedure, and all give the learner a basic vocab-

⁵ R. M. Hutchins, *The Higher Learning in America*, Yale University Press, 1936, p. 64. Quoted by permission of the Yale University Press.

ulary by means of which he can think, but no course is better than any other, except as there may be variations in difficulty, which in turn produce variations in effort on the part of the learner. A course must, therefore, stand or fall upon the value of its content for some other end than mental discipline.

As soon as high schools began to grow rapidly and to enroll students of widely varying interests, it became evident that what many pupils needed was vocational education. There have been enthusiasts who wanted to turn practically all higher education into vocational training. The vocational motif certainly has its place in the total plan of secondary education, but it would not appear to be adequate as a sole basis for the selection of courses.

Up until the last three decades the curriculum rested mainly upon its preparatory, its disciplinary, or its vocational justification. During the recent period, several groups of individuals have made determined assaults upon the existing curriculum. One group wanted to do away with traditional, scholarly training, another wanted to do away with specialization, a third wanted to base high school courses exclusively upon the present needs of pupils, and a fourth wanted to prepare students for their daily lives as future American citizens. In actual practice, the last two groups often joined forces. There have been, then, in recent decades, three main kinds of rebels: the antitraditionists, the antispecializationists, and the education-related-to-life progressivists. The curriculum of today is a direct result of these attacks.

In the days when only 5 to 8 per cent of adolescents continued their education into secondary school, the curriculum was quite rightly devoted to the producing of scholars, since that proportion is needed in each generation. Preparation for scholarship is just as specialized as preparation for carpentry, only there is more of it and therefore it takes longer. The scholar serves an eight-year apprenticeship—roughly from the ninth grade through college, then he enters a six-to-ten-year advanced training period parallel to that of a journeyman—from the beginning of graduate work to the achievement of permanent tenure as an associate professor—at which time he becomes a “master” of his trade, is authorized to vote in his guild, and may participate in the training of successive generations of journeymen. An academic education is certainly irrelevant to the needs of the youthful army now enrolled in high school, nor could society absorb such a large number of scholars even if they could be trained. Presumably every high school graduate should know something about scholarly pursuits, just as he should know something about plumbing or salesmanship or modern art. The revolt against the traditional curriculum, which began about 1910, has been gathering momentum ever since and will eventually succeed in eliminating from the curriculum such traditional elements as still survive, except

as these may be desired as electives or as necessary parts of a preparation of some pupils for college

Along with the revolt against tradition has gone an equally violent rebellion against specialization of all sorts, not only against the dividing off of subject matter into a hundred sharply differentiated compartments but also against highly concentrated vocational training, which was just as narrow as any other restricted type of education. The object of these particular rebels was to break down the artificial barriers between fields of learning, to integrate allied fields on the lower levels at least, and to present learning as a single picture instead of as a mosaic. One outcome of this movement has been the substitution of survey courses for the required work of previous decades. Thus, instead of taking five hours of modern history, three of ancient history, and three of civics, every student took one five-hour survey course in the social studies, in which he was given an integrated presentation of whatever material from these allied subjects seemed most vital for the future citizen. It should be noted that the basis of selection was general usefulness to the student who was *not* going to take further work in the social sciences rather than general usefulness in building a firm foundation for the student who was.

Members of the modern, progressive school of thought wanted to base the curriculum upon either the present or the future needs and interests of the pupils. The resulting program is supposed to provide for the acquisition of such information, skills, understandings, ideals, attitudes, and interests as are demanded by the different areas of living in which all people must make some adjustment—notably home life, vocational life, civic life, leisure life, and healthy survival, both mental and physical. Some of the investigators who wished to remake the curriculum along these lines began by studying the average day of many thousands of adults, to determine what was needed that had not already been supplied by the years below secondary school, while other investigators began to study the here-and-now needs of high school students, often by asking them to list questions to which they needed answers. The resulting lists are long and heterogeneous. A few samples appear below.

Personal Problems

- 1 How can I become more attractive and popular?
- 2 Am I normal?
- 3 Is God a person?
- 4 I'd like to know how my mind works
- 5 How can I find a goal in life?
- 6 What should my attitude toward alcohol, smoking, profanity be?
- 7 Why can't I have dates like other students?
- 8 How can I get a summer job?
- 9 When should a person get married?

Home Problems

- 10 How many dates should I have a week?
- 11 What should be my share of the housework?
- 12 How long should I let my parents dominate me?

School Problems

- 13 Why do teachers have favorites?
- 14 Should I join a school secret society if invited?
- 15 Why doesn't the school do more to prepare me for a job?
- 16 Why do we have to study Latin (algebra, grammar, etc) ?
- 17 Why do so many boys stand around when there are girls who want to dance?
- 18 How can I learn to concentrate?

Community Problems

- 19 How can I find out the difference between religions?
- 20 How can I learn not to be fooled by radio and newspapers?
- 21 What causes war?
- 22 How important is marriage to success in life?
- 23 How can the world organize for peace?
- 24 Why are taxes so high?
- 25 How can I find out which political candidate is telling the truth?⁶

Any such accumulation of questions runs the entire gamut from an inquiry by some child who wants to know if she is old enough to use lipstick to a mature question as to whether or not a good citizen is bound to obey a law he knows is unjust and, if he does obey it, how he can register his disapproval. If one follows this approach to its logical conclusion, one establishes courses in acceptable social usages, in effective methods of study, in courtship and marriage, in the concepts of morals and religion, in modern social problems, in mental hygiene, and so on, because such subject matter contains whatever answers may be given to the questions that are most commonly asked. That is, the curriculum is "adolescent-centered"

It is not difficult to find objections to any of these theories of curriculum construction. The preparation-for-college approach by itself produces a course of study quite inappropriate for most people because it stresses the technical preparation needed by a scholar, and most people will not become scholars. The mental-discipline theory has been shown to be false in its main contentions. The sociological approach, if used alone, would produce a curriculum that crystallizes things-as-they-are rather than things-as-they-should-be and would, if adhered to strictly, eliminate some of the courses that adolescents like best. A purely vocational basis is no better than any of the others, since it produces a course of study that is extremely narrow and does not prepare a pupil for the American custom of changing

⁶ C. B. Mendenhall and K. J. Arisman, *Secondary Education*, The Dryden Press, 1951, pp. 123-129

jobs at frequent intervals, nor for the wise use of leisure, nor for the business of being a good citizen and an intelligent voter. The basing of the curriculum exclusively upon the needs and drives of youth produces a curious and unbalanced course of study. It is, of course, not necessary that the student-centered curriculum should be superficial or trivial, but it sometimes turns out to be. Yet all of these bases contribute something to the determination of what the curriculum should contain. A high school has to prepare some pupils for college, it has to furnish as much transfer of training as possible, it has to help students to live in the world of today and tomorrow, it has to meet at least some of the students' more pressing needs and help them solve some of their more pressing problems, and it has to prepare for earning their living those who will go no further. In an effort to meet all these demands, many high schools present a curriculum without unity or coherence, and leave it to each student to find his way through the numerous offerings to whatever goal he seeks.

The Old and the New. The revolution in secondary education has been extensive and fundamental. It has affected every phase of high school work. In this book it is not possible to discuss the changes in more detail, but a brief case study might serve to illustrate the contrast between curricular offerings and the methods of presenting them in 1910 and 1959.

One of the writers attended a secondary school in which the college preparatory course followed strictly traditional lines. In four years of Latin, four of English literature, three of French, two of German, one each of algebra and plane geometry, one of ancient history, and one of chemistry there was no slightest effort to relate the material taught to daily living. Much of the work happened to be extremely interesting to the writer, but the demarcation between what happened in class and what happened outside was clear and sharply defined. The students never discovered, except through their own spontaneous observation, that English and Latin were related languages. The work in English, French, and German was mostly grammatical, and what readings were assigned were from classics written before 1800. Topics for composition were usually based on the readings. Skills and ideas in mathematics operated in a vacuum, and ancient history stayed decently dead. Having elected a preparatory course, one had no further choice as to what one studied. The teaching was often excellent, but the notion that schoolwork might be related either to the student or to life did not penetrate the classroom. There was nothing intrinsically wrong with the material itself, at present, in many schools, the same topics are so presented that they make a vital contribution to the lives of adolescent boys and girls.

Nothing reflects changing modes of thought better than the accepted and popular materials of instruction. Below are excerpts from the introductory lessons in two beginning books in Latin, one that was popular in the first decade of this century and a second that is in use today. First to be noted is the approach. The older book threw the lesson at the student,

who usually reacted by memorizing it, since he could rarely make much sense out of it. The newer text makes a more gradual approach, with illustrations and explanations. The writers of the older book clearly intended the student to learn Latin. This intent appears in the emphasis upon grammar, in the selection of words for the vocabulary (which was undoubtedly based upon Caesar's *Gallic Wars*), by the meaning of the illustrative sentences, and by the immediate introduction into Latin prose. The modern book concentrates upon the relation of Latin to English, it provides only a homeopathic dose of grammar, it minimizes the need for translation, and it uses only common words. Its vocabulary load is less than half that of the earlier book, and all terms are defined and illustrated. The immediate objective of the later book is clearly not the mastery of Latin or of prose style, but rather the development of an interest in what was Roman and an understanding of the relation of Roman culture and language to the student's own. These descriptions illustrate in condensed form the changes that have taken place in the secondary school curriculum.

The modern text begins with some introductory material on what a student can expect to get from a study of Latin, a brief discourse on the position of the Romans in world history, and a section giving direct quotations of Latin often heard in English speech—such as *veni, vidi, vici*, *magna charta*, *persona non grata*, or *quid pro quo*—with translations and explanations, plus two samples of English material translated into Latin—"My Country 'tis of Thee" and the nursery rhyme, "Twinkle, twinkle, little star." The first grammatical lesson begins with the following sentences

INSULAE

Britannia est insula. Europa non est insula. Italia paene est insula, Italia paeninsula est. Sicilia et Corsica insulae sunt. Viae et silvae et insulae et paeninsulae in Europa sunt. Silvae et viae in insula Britannia sunt. Cuba est insula. Est America insula? Africa et Asia non insulae sunt.

Questions 1. How many islands are mentioned?

2. How many peninsulas?

Reading Latin

As you read through a Latin sentence, try to get the meaning of each word as you come to it. Sometimes you will find a clue in an English word derived, or formed, from the Latin word, as *insular* from *insula*, sometimes you will have to guess from the rest of the sentence. Some words not explained in the lesson vocabularies are purposely used in the Latin passages. If you cannot guess their meaning, look them up in the Latin-English Vocabulary at the end of the book. Pay close attention to the endings, they will cause you all sorts of trouble if you don't. When you understand the passage, answer the questions, then translate, that is, express it in good English. Do not always use the English meanings of the Latin words as given in the vocabulary, but find English words of like meaning which exactly fit the sentence. Remember that Latin has no words for *a*, *an* and the

ENGLISH WORD STUDIES

Many English words have been borrowed from Latin without change. Some first declension nouns of this sort have kept the Latin nominative plural as well as the singular.

alumna, alumnae, antenna, antennae (or antennas, when used in radio),
larva, larvae, minutiae (singular rare)

Others usually have the English plural in -s:

area, arena, camera, cicada, copula, corona, formula

Remember that the English pronunciation is used for all of them, therefore -ae is pronounced like e in me. See the English dictionary for the pronunciation and meaning of these loan words, as they are called.⁷

The vocabulary consists of three nouns, two forms of the verb *to be*, and one negative. After the English meaning appears an English word that is derived from the Latin. The student is told to make sure he knows the meaning of the derivatives and can use them in English sentences. He is then to enter the vocabulary words into his notebook and try to find more English words derived from them.

Up to this point, there have been a dozen illustrations of Roman scenes, some of them colored. Throughout the book, there are more pages with pictures than without them. In every way the writers have made use of the pupils' daily experiences and have made provision for direct transfer of what is learned in class to daily life outside class. For instance, instead of stating baldly that "place to which" (*ad urbem*) takes the accusative, place "in which" (*in urbe*) takes the ablative, and place "from which" (*ex urbe*) takes the ablative, and leaving the student to make any sense out of it he can, the writers use a picture showing one lad treading water in a lake, another diving into the water from a springboard, and a third just emerging from the lake after his swim. These lads are labeled as *in aquā*, *ad aquam*, and *ex aquā*. Humor is frequently introduced. For instance, in a series of cartoonlike sketches, used in explaining indirect objects, there is one that shows a policeman writing out a ticket for a motorist who was shown speeding in an earlier picture, the policeman is saying, "*Ubi ignis est?*"⁸ Another series of illustrations, sprinkled through the book, shows pictures of modern postage stamps that have Roman statues, boats, temples, ruins, or individuals on them, and it is suggested to the student that he collect other stamps of similar character. Some attention is also paid to the feminine half of the student population—a feature sadly lacking in earlier texts—by such devices as a conversation between a mother and her two daughters, pictures

⁷ From B. L. Ullman and N. E. Henry, *Latin for Americans First Book*, pp. 9, 11. Copyright, 1956, by The Macmillan Company, and used with their permission.

⁸ Where's the fire?

of toys used by Roman girls, and descriptions of Roman houses, rooms, cooking utensils, and so on

In marked contrast to the modern text is the one studied by one of the writers in about the year 1900. The introductory matter was concerned mainly with how Latin words were pronounced. The first lesson occupied two facing pages. It began, without preamble, with three rules.

The subject of a transitive verb is in the nominative case.

The object of a transitive verb is in the accusative case.

A predicate noun is in the nominative case.

There was no explanation of the technical terms. There followed the statement that Latin nouns belonged to one of five declensions and that those of the first declension ended in -a. Then came a paradigm of the word "hasta" (meaning *spear*). At the top of the second page was a vocabulary of twenty-two words, of which eight referred to military matters—presumably as a preparation for reading Caesar. Next came about a dozen sentences to be translated from Latin into English, and then a similar number to be written by the student from English into Latin. There were no pictures or illustrations. At the very end of the lesson was a sentence in Latin to be memorized: *Carthāgō delenda est*. There was no explanation as to what this remark meant, who said it, or why it was important enough to be memorized.

The total load of technical words, all used without explanation, was as follows: subject, transitive, verb, nominative, case, object, sentence, predicate, nominative, genitive, dative, accusative, ablative, vocative, number, singular, plural, inflection, declension, ending, gender, masculine, feminine, neuter, common gender (which appeared in a footnote), stem, noun. The total is twenty-six words, many of which a pupil would almost certainly not know the meaning of.

It will be noted that the approach was wholly grammatical and that no attempt was made either to interest the student or to relate the work to the student's interests, activities, or abilities. There was one short section, just before the vocabularies at the back of the book, that listed English derivatives from Latin words, but few students ever had time to look at this section. In any case, it appeared to have been an afterthought on the part of the textbook writers and was clearly of no great importance to them.⁹

The Curriculum of Today and Tomorrow

The Core Curriculum The core type of organization of the curriculum has been steadily taking the place of the "required" subjects of

⁹ The name of the text has been omitted at the request of the publishers, since a few schools are still using it.

earlier times, in the sense that the work is required of all pupils and that it contains such material as is needed—not, as earlier, to be a gentleman and a scholar, but to be a useful citizen. The core consists usually of material from several departments, the material being selected as useful to the pupil who does not continue in that department. That is, ideas are drawn from here and there according to the present and future needs of students, and not according to the principle of providing a systematic introduction to the area of knowledge from which they are selected.

This arrangement of basic information from several fields has a number of advantages over the former plan of required, individual courses. It cuts across subject-matter boundaries and draws upon material from all fields for the solution of specific problems, thus tending to prevent the division of knowledge into compartments, it leaves free a number of elective hours for meeting the needs and interests of each individual pupil, it forces teachers from all areas to work co-operatively in planning the educational experience of students, it encourages co-operation between students and teachers in planning the curriculum, it provides for great flexibility, it assures the setting aside of adequate blocks of time for the consideration of current problems, it provides an exceptionally good opportunity for guidance because of the emphasis upon pupils' needs, it prevents much of the overlapping between courses, and it emphasizes the development of the whole personality and is as much concerned with the growth of attitudes, critical thinking, social sensitivity, and interests as with the acquisition of skills or information.¹⁰

The courses that compose the core curriculum are sometimes formed by selecting material from each of a number of departments and then having the teachers from the respective areas teach their own sections of the material. In other cases, the subject matter from several departments is fused and taught by a single teacher. The material may be selected in the first place upon the basis of what members of a department think is most essential for the average person to know, or it may be checked against the needs—present or future—of the pupils and only those items included that throw light upon already known problems.¹¹

A sample of the basis upon which a core curriculum is constructed appears in Table 61. Often, the departments of a school offer a sort of introductory course designed for those who will not go further in the subject. These courses are also "core" courses for a restricted area of work. A sample of a core for the sciences in a school is shown in Table 62. It will be noted that the material is drawn from several sciences. Such a course is based upon the contributions that the sciences have to make to the life

¹⁰ J. P. Leonard, *Developing the Secondary School Curriculum*, Rinehart & Company, rev. ed., 1953, p. 400.

¹¹ G. S. Wright, "Core Curriculum: Why and What," *School Life*, 34:71-74, 1952.

Table 61 PROBLEM AREAS

I Immediate Personal-Social Problems

Grades 7, 8, 9

Orientation to School, Living in the Home, Making and Holding Friends, Sex Relationships

Grades 10, 11, 12

Education in American Democracy, The Family in Civilization, Improving Home Life, Boy-Girl Relationships

II Immediate and Wider Community Problems

Grades 7, 8, 9

Living in the Community, Community Agencies and Services, Community Recreation, Community Citizenship, Transportation, Beautifying the Community, The Air Age, How People in Other Lands Live, Our Latin-American Neighbors

Grades 10, 11, 12

Community Survey, Community Health, Community and National Planning, War, International Organization, Role of America among the Nations, Role of Government, The American Tradition, Contemporary Cultures, Contemporary Religions, Propaganda Analysis, Public Opinion, Races, Ethnic and Class Groups

III Wider Socioeconomic Problems

Grades 7, 8, 9

How People Make a Living, Community Industries, Science in Our Daily Lives, Earning Money and Budgeting an Allowance

Grades 10, 11, 12

Selecting a Vocation and Getting a Job, Getting Your Money's Worth, How Technology Is Changing Our Way of Living, Conservation of Resources, Competing Economic Systems

IV Personal Development Problems

Grades 7, 8, 9

Life and Growth, Maintaining Good Health, How We Get Our Beliefs, Personal Planning, Personal Appearance and Grooming, Developing Intellectual, Aesthetic, and Practical Interests

Grades 10, 11, 12

Personality Development, Developing Intellectual, Aesthetic, and Practical Interests, Building a Social Outlook, Competing Philosophies of Life, Intelligence and Learning

Table 62 A SAMPLE "CORE" COURSE IN SCIENCE

- I Science in personal life
 - A Problems of adequate nutrition
 - B Structure and functions of the body
 - C Prevention of disease
 - D Behavior (as related to nervous system)
 - E Leisure activities
- II Science in the family
 - A Reproduction
 - B Heredity
 - C Safety in the home
 - D The home chemist (cooking)
 - E The home electrician
 - D The home plumber
- III Science in the community
 - A Improvement of soils
 - B Improvement in commercial foods
 - C Conservation
 - D Housing
 - E Communication
- IV Science in the world
 - A Technology
 - B Racial understanding
 - C The life span

From W. Burnett, *Teaching Science in the High School*, Rinehart & Company, 1957, pp. 145-146

of the common man, not upon what facts are needed for a continuation of work into advanced courses in any one science.

Usually the work of the junior and senior high school are thought of as a unit in preparing the core curriculum. The proportion of a pupil's work that is to be occupied by the core is greater in the sixth grade than in the twelfth, since in high school he has to take additional courses that will prepare him for either his college courses or the type of occupation that he intends to enter. There is also, at all levels, some room for electives. A sample arrangement appears in Figure 158. In this illustration, the "secondary" level of education is considered to extend from grade 7 through the first two years of college. The "personal interests" are the electives, and the "vocational preparation" includes preparation for college for some pupils and for a vocation for others—or perhaps both.

It would be hard to overestimate the importance of the curriculum. It furnishes pupils with many of the basic ideas and skills that they are going

to use throughout their lives. It influences and often determines their future vocational level. It keeps them in school or drives them out of it. And, unfortunately, it is sometimes a potent source of irritations and frustrations. If the curriculum loses touch with reality, the students will devote their energies to extracurricular activities or else leave school. It takes the combined efforts of philosophers, sociologists, psychologists, research experts,

Periods of Day	Early Secondary School			Middle Secondary School			Advanced Secondary School	
Grades	→ 7	8	9	10	11	12	13	14
1	Personal Interests			Individual Interests				
2				Vocational Preparation				
3	Common Learnings (Core Curriculum)							
4								
5								
6	Health and			Exercise				

Fig 158 *The Core Curriculum*

From The President's Science Research Board on Science and Public Policy, 1947, IV, 85-90

school administrators, teachers, and pupils to keep the curriculum up-to-date, vital, and healthy. Curricular research should always be in progress, especially during periods of rapid social change. Any curriculum that is "finished" and "settled" will almost certainly be outmoded in a few years. With adequate co-operation among all those who have something to contribute, a school's academic offerings can give adolescents precisely the intellectual food they need for their maximum personal development.

Summary

The curriculum of the high school is a heritage from former days, both remote and recent. It represents many trends and many points of view. It is not as well adapted to the needs of adolescents as it could be. The writers are still old-fashioned enough to believe that the center of school

life ought to be its classwork and that a school is no better than its curriculum. Many people would not agree with either notion. The details of curricular development are, however, not as important as the conviction that what is taught in class really matters. The methods of presentation also matter. Both content and method should be adapted to the nature of adolescent needs, adolescent abilities, and adolescent attitudes. Classwork ought to be about something that boys and girls want to learn because it is important to them, either immediately or in their plans for the future. And classes ought to be fun. When these two conditions are met, the curriculum has a chance to be a vital force in adolescent life.

References for Further Reading

BOOKS

Other Texts

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 Jersild, *Psychology of Adolescence*, Chap. 14.
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- Bottrell and Broadhead, *Educational Sociology*, Chaps. 9-10, 12.
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Conclusion

The End of Adolescence

Adolescence is an interesting period to the teacher and an exciting period to the individual who is in the midst of it, but eventually it must end and make way for the emergence of adulthood. It seems, therefore, useful to consider of what maturity consists, as reported by several people competent to judge. Although these excerpts do not say all there is to be said on the matter, they contain food for thought.

1 A person is emotionally mature to the extent that he is able to use and enjoy his emotional resources, able to get satisfaction from enjoyable things, able to love and laugh, able to experience anger when faced with thwartings that would arouse the temper of any reasonable person, able to accept and to realize the meaning of the fear that arises in him when he faces frightening things, without needing to put on a false mask of courage, able to reach out and seek what life might offer, even though to do so means to face the possibility of gain and of loss, of enjoyment and of grief.

The writers list the main attributes of emotional maturity as (1) capacity for sharing emotion, (2) capacity for giving emotion, (3) expansion of loyalties, (4) increased realism in appraising people, (5) evaluation of hopes and aspirations, (6) tolerance of aloneness, (7) widened range of projected feeling, and (8) increased capacity for compassion.¹

2 An adult is a person who is successful (a) in functioning as an independent unit with gratification of his desires in terms of the culture in which he lives, (b) in establishing satisfactory and acceptable biologic and social interaction with other people, and (c) in finding self-expression, self-extension, and self-objectivation in his social milieu.²

3 An adult is one who (a) has an integrated personality, (b) has sublimated or socialized his basic impulses and drives, (c) can accept reality, tolerate frustration, inhibit his impulses, accept his own inadequacies and unavoidable pains, humiliations, and losses, and is free from excessive anxieties, worries, or fears, (d) can solve the common problems of living, (e) is happy in his work, (f) accepts

¹ A. T. Jersild, *The Psychology of Adolescence*, The Macmillan Company, 1957, pp 192-193.

² J. Ruesch, "The Infantile Personality," *Psychosomatic Medicine*, 10 134-144, 1948.

responsibility for his own actions, (g) can establish and maintain satisfactory and lasting relationships with other people, and (h) is able to feel strong emotions but also able to control their expression³

These authors are referring primarily to emotional and social maturity. An adult faces reality, estimates it objectively, and adjusts himself to it. To be sure, the standards above are set so high that most people will not reach all of them. The child that each individual once was remains within him, and from that child he never quite escapes.

Some of the criteria by which one may know that adolescence has come to an end are more definite and more easily recognizable than others. The measures of maturity to be discussed in the following section have been derived partly from analysis of adults who failed to grow out of childish or adolescent points of view, partly from experimental results in the longitudinal studies already referred to at various times, and partly from a consideration of the essential problems of adolescence—as summarized from many sources in the first chapter of this book.

Adult Levels

Physical Maturity For physical adolescence, the end of the period may be seen most objectively. A high school pupil is physically an adult when he has reached his final height, when his body has assumed adult proportions, when his heart and other organs are of adult size, when his bones have reached their final size and density, when his sexual functions have become established, and when all secondary sexual characteristics are in evidence. Skeletal growth and establishment of primary and secondary sexual functions are usually complete by the age of eighteen, but internal growth is still in progress. Some people hold that all gains in weight after the age of twenty-five are abnormal and consist of unnecessary deposits of fat, others think that small increases of weight should take place until the later years of adult life.

Physical adulthood is almost certain to arrive; indeed, it can be prevented only by extreme deprivation or deficiency. It is one type of maturity that is not appreciably affected even by the greatest coddling or the most ardent wishes to remain a child.

Emotional Maturity This type of maturity is more difficult to estimate. As long as people become angry over superficial social situations, are dependent upon older people or members of their own sex for happiness, are inclined to take things personally, or continue to run away from reality, they are not yet adults emotionally. It is at once clear that some people

³ P. M. Symonds, *The Dynamics of Personal Adjustment*, Appleton-Century-Crofts, Inc., 1946, 666 pp. Essentially the same traits are given by R. G. Kuhlen, *Psychology of Adolescent Development*, Harper & Brothers, 1952, p. 573.

never grow up and that others do not become mature until long after they have passed beyond the age of legal responsibility.

The homosexual adult, the promiscuous adult, and the person who falls in love with much older people are showing behavior appropriate to an earlier period and inappropriate to mature life. The true adult has selected what he or she believes to be a permanent mate, has left experimentation behind, and has settled down to normal sexual restrictions. Not all people—especially not all women—marry. The unmarried adult has special problems of maturity. He, or more likely she, learns to substitute other drives and interests for those that are sexual. Most unmarried people have at one time or another intended to marry and have gone through the preparatory emotional stages of increasing heterosexual interests and concentration upon one person. They were therefore adults at one time. The chief danger for them is that, having failed in their first major emotional venture, they will retrogress to the earlier levels of dependency upon older people or upon homosexual attachments for emotional satisfaction. Such a regression not only is undesirable in itself but may prevent a second marital attempt.

Adolescents tend to take everything personally, to get their feelings hurt if they are criticized, and to be quite unwilling to face unpleasant situations—especially of their own making. As long as these reactions persist, an adult is still an emotional adolescent, no matter if he is the head of a corporation or the president of a bank. The businessman who tells his secretary to get him out of an appointment he does not want to keep—although he may have made it himself—so that he can keep some other engagement that appeals to him more is showing no more mature behavior than the adolescent who, on the ground that he now likes some other girl better, wants his mother to get him out of going to a party with the girl he has already asked. Facing reality is admittedly a tough job, but it has to be done if one is to grow up.

The child knows he has limitations, but generally he does not care a great deal, and the adolescent likes to hide his shortcomings even from himself. The adult, however, has to admit to himself at least that there are things he cannot do and that he is not the genius he may once have believed himself to be. If he evaluates himself objectively and plans his life to suit his capacities, he has entered emotional adulthood. Thus, for instance, the drugstore proprietor in a small town who says, "I'd be a failure in a big city, but I'm doing fine here, I've a nice home and family, and I'm happy," has made his compromise with life and is now a true adult. The hectic rushing about, the sowing of wild oats, the search for a thrill belong to the years of adolescence. The adult who still shows these symptoms has not completely grown up.

The small child inhibits his emotions hardly at all, whatever he feels

is translated into action. If he does not like a new acquaintance, he pushes him away. An adolescent has somewhat more self-control and can inhibit his expression well enough to observe common courtesies toward those whom he does not like, although he soon regresses to childish levels if he is forced to work with or to be frequently with a disliked person. It takes an adult with well-developed powers of inhibition to work day after day in moderately close contact with someone he dislikes and neither wear out under the strain nor precipitate scenes.

The typical causes of emotional behavior among adolescents and the reactions commonly made to these stimuli have already been discussed in an earlier chapter.⁴ As long as these stimuli produce these results, an individual is emotionally adolescent—not emotionally mature. Naturally adults have emotions that can be just as violent as those produced at any earlier age. The exhausting ones are, however, not as easily aroused, and when aroused they are better controlled and more readily diverted into relatively harmless channels. Experience with sundry forms of escape has provided means for resolving minor conflicts. Even the pleasant emotions are not as easily aroused as they once were, nor are they quite as enjoyable.

In order to illustrate the points made concerning each type of maturity, a few case histories are presented from time to time. These persons were all within the limits of normality, and in many respects they were delightful individuals, but each showed more or less serious and pervasive forms of immaturity.

Miss R. is a brilliant woman of forty-eight. She has for ten years been an excellent high school teacher, one of the best in a large system. Since her adolescent days she has had three different bosom friends. The first was a childhood acquaintance with whom Miss R. roomed in both boarding school and college. Both taught in the same school and continued to live together. Miss R. was dominant and most attractive. Many boys and men fell in love with her, but none awakened an ounce of interest. About five years after graduation Miss R.'s friend met a young man to whom she became engaged. Miss R. appeared to have no objections, but managed subtly to keep the marriage postponed until the man lost interest. She and her friend had a terrific row and separated—the friend to remain single all her life. Miss R. was despondent for a month or two, until she found another companion—a woman ten years younger than herself. Then she again became radiant and fascinating. Eventually the second friend also fell in love. This engagement was broken three or four times, but in the end the friend married and went away. Again Miss R. was disconsolate for some time. During this period she herself finally yielded to her most persistent suitor and married. She and her husband are good friends, he is deeply in love with her and has apparently decided to be content with whatever she sees fit to give him. In the second year of her marriage Miss R. became interested in a girl nearly twenty years her junior. Eventually the girl came to live with her married friend. The strangely assorted trio is still together, but

⁴ See pp. 264 ff.

the girl—now a woman—is trying to break away. Miss R. is again indulging in her skillful machinations, and the husband is trying to be deaf, dumb, and blind to the strain. There has never been any suspicion of actual sexual relations between Miss R. and any of her three intimate friends, the relationship is rather what one finds between two inseparable chums twelve or thirteen years old. Miss R. is not so much homosexual as preadolescent. If she were homosexual she would probably not have married, and she almost certainly would not form attachments with perfectly normal girls and women. It is to be noted that with each shift in companion Miss R. is forced into selecting as her new chum a person whose age is further and further below her own. Those of her own age are by now too mature to be interested. If the present chum leaves, Miss R.—now nearly fifty years old—will have to attract some girl thirty to thirty-five years younger than herself, or else finally grow up—which is unlikely.

Millie is a woman, now in her seventies, with most of her life behind her. She is an odd creature in many ways, most of which are attributable to her extreme emotional childishness.

As an only child, Millie was the center of her parents' devotion. They had little money, but whatever they could save they spent on Millie, who always had more hair ribbons, prettier clothes, and more playthings than her friends. Her mother waited on her, dressed her, washed her, and guarded her. A princess could hardly have had a more devoted slave. Millie was not very happy with other children because she did not know how to adjust herself to them, in fact, it probably never occurred to her that there was any adjusting for her to do. She always wanted the leading role in every game, but since she was timid, hesitant in speech, deliberate in thought, and pathologically afraid of being hurt or of soiling her lovely clothes, she was not exactly equipped by nature for being a leader. Actually she trailed along with the other girls in the neighborhood, never popular, but overlooked rather than disliked. In school, Millie was docile and applied herself with moderate success to her lessons. Throughout her childhood she continued her dependence upon her parents and her avoidance of anything that was dirty, noisy, dangerous, or unfamiliar. She disliked all small boys on principle. With small girls she was not especially happy either, but she developed very early a habit of daydreaming about her daily experiences, assigning to herself a dominating role. As a result, the childhood that she now recalls was a golden age. Most of what she recalls either never happened at all or is so distorted as to be barely recognizable.

After she graduated from high school Millie remained at home. She read a good many books and magazines, spent hours in selecting materials for her dresses and even more time in idle daydreaming. She changed all her clothes twice every day, she stepped out of whatever she was wearing, leaving everything on the floor while her mother prepared a bath and then redressed her in clean clothes and combed her hair. Millie never washed or ironed her own clothes or prepared a meal or washed a dish or sewed on a button. Once in a while she helped her father in his store by playing cashier for a few hours. She was willing also to take orders over the telephone, and she quite enjoyed adding up the monthly accounts and making out the bills.

When Millie was about twenty-five, her father died, and she inherited his

small grocery store Millie left most of the waiting on customers to an elderly clerk who had worked in the store for years, and applied herself to the ordering of supplies and the handling of finances. She was quite successful at both. In the course of time she even helped somewhat in the store by waiting on such customers as she had known as a child, since she could in this way maintain a semblance of social life. Millie continued to live with her mother. She often complained because her acquaintances married and moved away, whereas she had to stay in one place and never had a chance to meet any eligible men. This latter statement was not true, for Millie had as many "chances" as any other girl in her group, but she regarded men and boys as ogres and would have nothing to do with them. She has never been to a party or a dance or to the movies with a boy or man in her entire life.

When Millie was about forty-five, her mother died, chiefly from overwork. This death left Millie not only alone but quite helpless in regard to the daily routine of eating, bathing, dressing, and so on. For instance, Millie had never combed her own hair or drawn the water for a bath or boiled the eggs for her breakfast. For some weeks her life was chaotic, as she slowly learned to meet her own personal requirements. Her mother's death was the one really bad shock of Millie's life. She reacted to it in two ways: by wailing hopelessly like a three-year-old and by becoming infuriated in the manner of small children who are too young to understand why anything they want should be denied them.

Gradually, Millie made sufficient adjustment for continued survival, chiefly through the hiring of a colored woman to whom she turned over all household matters. Millie then devoted her full time to the store, of which she has made a modest success. She was never lacking in intelligence, and after reading many books on how to manage a store, she developed enough confidence in herself to earn her own living.

Millie has now retired from active participation, although she is still a partner in the store and derives an income from it. She can hardly be said to have retired from social life also, because one cannot retire from what one has never entered. Millie sometimes sees an old acquaintance, but otherwise she talks only with her housekeeper. She could presumably talk intelligently about the management of a small store, but actually her only topics are her mother (whom she still calls "Mamma"), her childhood memories, and her resentment against the world because she has no parents, no husband, and practically no friends. Her only regular human contact, except with the housekeeper, occurs at noon when she goes to a nearby, small cafeteria for her dinner—a habit she developed in the period after her mother's death. There her performance is always the same: she cannot decide what she wants, so she takes a helping of everything she sees that appeals to her, as a result she arrives at the checker's desk with two kinds of soup, four different rolls, both tea and coffee, three salads, and four desserts. An assistant then carries her tray or trays to a table, gently but firmly removes two thirds to three fourths of the servings, collects the money for the balance, and settles Millie at her favorite table. This procedure has been going on for two decades. Millie prefers young men to young women, falls in love with each successive one (occasionally making so bold as to bring him a bag of candy), and talks endlessly about him to her housekeeper. The managers of the cafeteria rather foster these innocent attachments, since Millie's pleasure in her few "intimate" moments with her latest young man are

sufficient stimulus to keep her from blocking the line, as will otherwise certainly happen

Millie is not insane, merely extremely childish in all personal matters. She has never had an intimate friend, and it is improbable that she ever will. Whatever value she had for her community has already been contributed. From now on she will have to be looked after by hired guardians—and no matter how much attention she gets from them, it will never be enough.

Social Maturity The socially adequate adult is also difficult to describe, although the experienced clinician can recognize both social maturity and social immaturity without too much trouble. Blind loyalty to one's friends and blind prejudice against anyone who is different are adolescent characteristics, a person of adult years who shows them is still socially an adolescent. The true adult is able to get along in casual business relationships with practically any other normal adult. One naturally cannot be expected to like everyone in the world, or to approve of everyone, but the grown man who can work only under a friend's direction is on a social par with the adolescent who can do laboratory work only if paired with his chum.

Complete emancipation from home must take place, or adolescence is not yet over. No matter how old individuals are, they remain children emotionally if they must run continually to their parents for understanding or assistance. One should not suppose, however, that callous indifference to parents is a sign of maturity. Quite the opposite! Revolt and indifference are normal in adolescence because they are often necessary in order to break familial ties, but they are indicative of immaturity thereafter. The need for revolt should be over. If it nevertheless continues, or if the scars of previous antagonisms have culminated in either indifference or hatred, childhood and adolescence linger on. The true adult loves his parents and is willing to take their desires into consideration, but he makes his own decisions and lives his own life.

The adolescent is typically a person who feels insecure because he does not know what to do or how to act in various social relationships. Of course, an older person who finds himself in a quite new social situation—in a foreign country, for instance—may be as lost as an adolescent, but an adult is characteristically able to adjust himself easily and naturally to ordinary and recurrent social situations. The grown person who is still embarrassed and distressed by the customary daily contacts with people has not yet reached the end of his adolescence.

The adolescent is abnormally dependent upon his own small group of friends. He must have precisely the same clothes that they have, must enjoy the same things, must use the same catchwords, must hold the same opinions. Otherwise he will be considered "queer"—a terrible fate. A person is not an adult until he is free from such slavish imitation. Those of mature years

who expend time, energy, and money in "keeping up with the Joneses" are showing a typically adolescent trait that has persisted after its period of usefulness

The two individuals described in the following histories had not yet reached an adult level of social competence. The first was still a child and the second had prolonged her adolescent enthusiasms and attitudes into her mature years

Mr. B is a young man of thirty-two, the only child of a widowed mother. When Mr. B graduated from high school he entered his father's business as a book-keeper. A year later his father died. Mr. B had always been abnormally attached to his mother, upon whom he depended for all kinds of help. His mother kept his clothes in order, bought everything for him, was his constant companion, read aloud to him in the evening, cooked his favorite foods, adjusted her time to suit his, helped him with extra work when necessary, read and abstracted professional books, kept his bank account, wrote his checks, made his appointments, sent him at intervals to the dentist, chose the few acquaintances she allowed him, and was the center of his life. The young man had never had a girl, nor had he felt the need of feminine friends except his mother. Two years ago the mother died. The emotional shock was severe, but the practical results were even worse. Mr. B could not tie his own necktie, shine his shoes, or even find his belongings. He did not know how much razor blades, soap, or toothpaste cost because he had never bought them. He had no idea what his current expenses were. He had no friends to whom he could turn. Without his mother's constant supervision he got behind in his office work and soon lost his job. His clothes became shabby, but he did not know where to get more or how much he should pay for them. The childishness of this man's behavior is too obvious to require comment.

Mrs. W, a childless widow, is now over fifty. In her youth she went to a small school, where she did only mediocre classwork but had a glorious time. Mrs. W was not a popular student in her own right, but she basked in the reflected glory of a sister who had been a great leader in school affairs. After graduation Mrs. W had married one of her sister's cast-off beaux. He was a wealthy man upon whom she prevailed to make large donations to her former school. Eventually he became a trustee. Mrs. W never missed a reunion or other gathering of alumnae. In addition she frequently returned to school for a visit, often remaining for several weeks. She knew almost every girl in every class, entertained students in her rooms, and was entranced by their chatter. After her husband's death she rented a house near the school grounds and has lived there ever since. The girls stream in and out of her house, accepting her hospitality but making slurring comments about her among themselves. Since she will probably leave her considerable fortune to the school, the authorities do not care to interfere with her harmless but rather silly contacts with the students. When she is with them, nothing but her gray hair and matronly figure distinguishes her from them. Her conversation consists chiefly of anecdotes about students—past or present. She giggles at their witticisms, admires their talents, and follows their careers. To her age-mates she is an utter bore. She never tires of telling how she was once caught eating bread and jam in

the chemistry laboratory or how her sister held three important student offices at once Mrs W is by no means a fool, in spite of her obsessions about student life. She handles her own investments shrewdly, makes excellent addresses before clubs when the school wants to raise money, dresses well, and manages her house with taste and skill. It is in her social development that she is retarded. In the midst of adolescent chaff and humor she is at home, in an adult conversation she is confused and uncomfortable. She has no friends of her own age—but many adolescent girls find in her a person who is comfortably older in worldly wisdom and comfortably adolescent in interests and enthusiasm.

Moral Maturity The end of moral adolescence is extremely difficult to define. It consists probably in the development of a relatively stable and relatively satisfying attitude toward life and the establishment of ideals by which one's own conduct is guided. The adult who is still perplexed and emotionally searching for an answer to the universe—and expecting to find one—is showing typical adolescent behavior. An adult does not accept unthinkingly the existing code of morals or current social situations, but he does regard such matters as facts which exist and to which one must make some reasonable adjustment. The adult who is still in a state of flaming revolt against the world has not outgrown his moral adolescence. The desire to reform the world before tomorrow is an attitude of youth, not of maturity. Deep-set racial prejudices, bigoted religious beliefs, and uncompromising ethical standards are all typical of the adolescent period. The tendency from the days of childhood into the adult years is from conservatism and rigid belief toward liberalism and tolerance. The change is so gradual that the exact moment when the adolescent becomes an adult is impossible to determine, but a grown person who still carries the burden of uncompromising intolerance around with him has not yet reached his moral and ethical maturity.

One of the writers first knew Miss N during their common childhood and has seen her at intervals ever since. Even as a child Miss N was a rather timorous creature who clung to older people and wanted someone else to tell her what she ought to do in each small emergency. Just what gave Miss N the idea that she could be successful in social service is not known, but after she had completed high school and a year in a teachers college, she entered a school for social work, eventually graduating from it. For a few years she worked for various charitable organizations, but never held a position for long. When she was nearly thirty, she took on a quite routine job in the psychiatric ward of a large hospital taking brief case histories of the patients at their entrance into the hospital. Much of the information she obtained from whoever accompanied the patient at the time of entrance, she sent for any other person who might add data, and had to leave the hospital only if an informant whom she needed to question could not come to her. The histories she took went to the medical staff and eventually into the records. Miss N usually never saw the patient. Once she had written something in every space on the blank used for recording the admission history, her work was done. She

was conscientious and meticulous about filling every space on every blank. As a form of social work Miss N's job was deadly dull, but it suited her excellently, and she has held it for over thirty years. Her only complaint has been that from time to time the upper echelon of authority in the hospital saw fit to modify the blank, thus forcing her to omit a few questions she had been asking and add a few new ones.

In her life outside the hospital Miss N always leaned on someone who would make decisions for her. Until she was nearly forty, her mother told her what was right or wrong. After her mother's death, Miss N tried to attach herself to various people whom she admired, but without success. After some five years of failure in personal relations she became a devout Catholic, agreeing willingly with whatever doctrines she was told were true. Moreover, she began to live with a domineering, elderly woman, who told her what she should do and think. With her problems thus settled, Miss N was completely content with her life. Not long ago she explained to the writer her method of attack upon a new problem. She said she asked herself two questions: Would my mother want me to do this? Would the Church want me to do this? If both answers were affirmative, or both were negative, she acted accordingly, if there were a tie score, she asked her house-mate for an opinion, thus having someone else cast the deciding vote. Miss N seems to have no concepts of right and wrong for her guidance. She leans on others for their opinions just as she leans on an unfilled case-study blank for guidance in asking questions.

Mrs. C is an elderly woman who has supported herself by renting rooms to college students. Her advertisement in the college newspaper always stated that she would not accept Negroes, Orientals, Jews, or foreigners. Last year she discovered in the middle of the semester that one of the boys was Jewish, though neither his appearance nor his name suggested it. She immediately ordered him to leave and upbraided him for deceiving her. He answered that he had not seen her advertisement and had been sent to her house by a Gentile friend, who had told him nothing about her prejudices. He offered to leave at the end of the semester but pointed out that all rooms near the campus were already taken and if he left at once he would have to move to the outskirts of the city and spend one to two hours a day on busses. Mrs. C would hear of no compromise. The boy did not move, and the next evening he found his door locked when he returned. He spent the night with friends and the next day talked with the dean of men to find out if his landlady had the right to put him out of his room in the middle of the semester. The dean called Mrs. C on the telephone, but she remained adamant and refused to let the boy stay for the remaining weeks of the semester. Finally the dean sent the lad with a campus policeman to the address, where the policeman's uniform and authority made a great impression upon Mrs. C. Under protest she unlocked the door and agreed to let the student remain for two or three days until some other arrangement could be made. In the meantime, the dean located and telephoned to Mrs. C's married daughter, who was greatly upset when she learned that a policeman had been sent to the house. The daughter offered to accept the boy in her own home for the remainder of the year and to keep her mother away during that time if the authorities would let her mother alone. Since her house

was as near the campus as her mother's the student willingly moved. The dean agreed to take no further action, except to cross Mrs. C's house off the approved list and to order the student paper to reject any further advertisements from her. Upon being informed of these measures, Mrs. C visited the dean to lodge a protest. He expected to find her generally deteriorated and childish, but such was not the case. She was rigid in her thinking, to be sure, but her wits were sharp and she constantly outmaneuvered him in conversation. She seemed in most ways rather more mature than the average. Her aversion to various minority groups she attributed to once sitting for a semester in school next to a foreign boy who smelled of garlic. The rationalization and the prejudice were about equally childish, and she reverted to an almost infantile peevishness when she was finally convinced that in the future she would have to rent her rooms to businessmen and not to students. She still nurses her grievance against the college and expatiates upon it to anyone who will listen, but the more she talks, the more she demonstrates her underlying immaturity.

Intellectual Maturity Mature thinking is indicated by a number of more or less related developments. Unless an individual is a defective or a lunatic, he will achieve at least the minimum level of adult intelligence—that is, in objective figures, he will eventually have a mental age of at least thirteen. Mental, like physical, development takes place with age, and is prevented only by extreme deprivation. From present data one can reasonably assume that an adult mental level is reached at some time between the ages of sixteen and twenty-five. In the course of time it may be possible to tell when an individual has reached a mature level in judgment, reasoning, imagination, or other intellectual qualities, although such measurements are not as yet adequate for purposes of establishing the level of maturity. Nor have tests succeeded in tracing the growth of intellectual independence, or the ability to substitute the independent evaluation of evidence for dependence upon authority.

At the same time that a person's mental capacities are growing, his interests are changing. The man who continues to play strenuous team games and the woman who dotes on parties are both showing adolescent traits. So also is the adult for whom the sentimental love story and movie still have a fascination, or the one who hangs over the radio or television set by the hour. The true adult may have a keen spectator interest in games, but sports are not meat and drink to him—unless they are a legitimate part of his business. He occasionally listens for a few minutes to some catchy dance tune on the radio and is amused by the cowboy on the television screen, but he soon turns to something else. He goes to parties now and then, but they are no longer the high points in his life. He reads current-events magazines, a few short stories, and more or less technical material concerning his work. When he has become fully mature he discovers that the typical interests of adolescence not only fail to thrill him but actually bore

him Not all people, however, succeed in developing mature intellectual interests and attitudes, even though their basic ability has reached an adult level.

Miss M is a teacher of art in a girls' boarding school She has been there for many years The girls like her well enough, when they think about her at all—which is not often If a student states to a newcomer that there are nine resident teachers in the school and then starts to enumerate them, she almost always leaves out Miss M and cannot even think who is missing In appearance Miss M is a roundish, rubicund, bustling sort of person, with a constantly smiling face and a girlish giggle, which is, however, only a mannerism and not the result of having a sense of humor The giggle and the smile are as empty as they are indiscriminate Together they form Miss M's defense against a world that she does not in the least understand The woman does no harm so far as the casual observer can make out, but it is doubtful if she does much good either

Conversation with Miss M is difficult, not because she does not try to be pleasant but because she has nothing to say She has no opinion on any topic, even in her own field, although she is an industrious reader of books on art Her class-work is based upon what she has read, and she does not encourage deviations from her plans for the day's lesson If a pupil brings up a new point, Miss M smiles pleasantly and says, "Yes there may be a lot of truth in what you say" or something else equally vague, and goes right on with what she had planned She constantly quotes authorities, often verbatim, both in class and in conversation

Miss M's most irritating trait is a tendency to quote the sayings of her students Aside from the fact that teachers in a boarding school become very tired of listening to the outpourings of adolescents, either directly or in quoted form, Miss M's anecdotes are only slightly amusing at the best and are often quite pointless This conversation of two other teachers took place in the presence of Miss M, who repeated it several times to others during the next few days as a sample of sparkling wit

TEACHER NO 1 Those shoes of yours are just what I want Where did you buy them?

TEACHER NO 2 In Belgium last summer

TEACHER NO 1 In that case, I guess I'll have to go on wearing my old ones

Miss M laughed uproariously at the time of this exchange and was still referring to it a dozen years later

Except in intellectual maturity Miss M is not a silly woman She manages the practical affairs of life quite as well as the next person Her manners are excellent, and she is entirely at ease in all kinds of gatherings She is never awkward or at a loss for something gracious to say She does not get embarrassed or upset She is not moody As a cheerful, laughing, healthy child of ten she would be a great success, and it is a pity that she could not have an adequate adult life in a feminine version of Peter Pan She can get along well enough in adult social life, but adult intellectual life baffles her completely

Finally, a fully grown-up person has found work that he likes and can do satisfactorily The selection of an occupation, the preliminary training,

the search for a job, and the early adaptations to the conditions of employment are all problems of middle and late adolescence. A person is not economically adult until he is free of them. Sometimes, to be sure, an individual gets into and continues in the wrong kind of work for several years and then has a chance to take the training needed for another job. He therefore returns to his adolescence for a short period. Such interludes are often necessary and, if not repeated, constitute only a temporary and recognized immaturity. The vocationally childish people are those who hate either all work or their particular work, those who change jobs constantly, those who have no interest in what they are doing, and those who are never satisfied with their working conditions, hours, or salaries. The adolescent frequently considers steady employment as an imposition—once the thrill has worn off. When he gets bored with some chore he is supposed to do, no one is surprised if he simply quits. Until boys and girls find their places in the world, one can expect unrest, boredom, and revolt. They become adults when they settle down to a job that appeals to them and exchange adolescent rebellion for adult dependability and interest in their work.

Mr. J. is a charming man of twenty-four. He is good-looking in a rather boyish way and has pleasant manners, especially toward older people. He has been earning his own living, mostly in dead-end occupations, since he was seventeen. Mr. J. has plenty of ambition, but he attaches his enthusiasm to quite unreachable goals. At seventeen he decided to be a singer, left school, and got a small job that left him some hours free each day for practice. For two years he worked hard and faithfully, but he simply did not have the necessary native talents. Thus far the story is not remarkable. Most adolescents have one or more episodes of this sort. Upon being disillusioned about his voice, Mr. J. took up ballet dancing—although friends told him he was already much too old. Again he plunged into his training, working at a job only enough to support himself and spending the rest of his time in training. For two years he was heart and soul for the ballet. He made some progress, but not sufficient to meet competition in an overcrowded market. He next became fascinated by radio work. He got a job as messenger boy in a large broadcasting station, spent his earnings in taking voice training and courses in radio announcing. He was given a few chances on small programs, but was too colorless to attract attention. Eventually he decided to forsake broadcasting, but he still wanted to do something in radio, so he learned to play a trombone moderately well and got a job with a small band that played once in a while on some program. He became the band's business manager, secured a few bookings, and struggled along for about six months before admitting failure. While he was out of work he took a job as scene shifter in a theater. He was delighted with the stir and excitement behind the scenes. Within a week he was enrolled in an extension course in dramatics. His enthusiasm again ran high as he began to train himself to be an actor. He is still at it and is extremely annoyed over the likelihood of being drafted within a few weeks. His teachers agree that he is a pleasant, capable young man with an agreeable speaking voice, but no particular talent for the stage. Mr. J. has never outgrown his adolescence. Occupations that seem to him glamorous con-

time to arouse his enthusiasm. At twenty-four he has not yet shown an interest in any work for which he has adequate ability. He has never faced the fact that he is an ordinary young man who has an appreciation of the aesthetic but no specific talent. He is content with dead-end jobs that leave him free time for pursuing his most recent enthusiasm. He lives in a tiny room, eats little, works at tasks below his mental level, and eschews all vices. Thus far his life has been utterly harmless—and utterly impractical.

Miss Addie, as she is generally called to distinguish her from her three maiden sisters, is a busy little person who may be seen almost any day tripping from her house to the library, where she is the curse of the library staff. Ever since she was thirteen or fourteen years old Miss Addie has been experimenting with religions. She was, as a child, well content with the Congregational Church, to which her family belonged, but in her early adolescence, the church hired a new pastor, with whom she fell violently in love. The feeling was far from being reciprocated, and the girl decided that Congregationalism was the wrong denomination for her. She presently began to attend services at an Episcopal Church nearby, but some episode there made her equally discontented. She next tried Catholicism, and for some time talked of becoming a nun. These ventures rather exhausted the local possibilities, and Miss Addie began to haunt the library, withdrawing books on all sorts of religions and religious movements. Her conversation centered around her readings, of which her comprehension was far from accurate. In the course of the following thirty years she joined everything from the Oxford Movement to Yoga, and was prevented from going to India to sit at Gandhi's feet only by lack of sufficient funds. She is now nearing sixty and is still passionately searching for a philosophy of life that she can accept. At one time she joined a "group" in the country, lived there for a few months, and was terribly upset when the "leader" was arrested for treating physical disabilities without a medical license—or medical training, either. Miss Addie lost about half her savings through this venture, but she still looks upon her days at "The Retreat" as the high point of her life, although what she seems to have enjoyed was the communal social existence rather than the religious or moral stimulation. She will soon reach the point at which she will run out of religions! This search is quite typical of adolescence, but at sixty, it is an anachronism. In all probability what Miss Addie has been searching for is not religion at all, but some kind of human companionship that satisfies her, nevertheless, to herself she is an earnest seeker after a philosophy of life.

Summary. A true adult is, then, a person of adequate physical and mental development, controlled emotional reactions, and tolerant attitudes, he has the ability to treat others objectively, he is independent of parental control, reasonably satisfied with his point of view toward life, and reasonably happy in his job, he is economically independent, he is not dominated by the opinions of those about him, nor is he in revolt against social conventions; he can get along in ordinary social situations without attracting unfavorable attention, and, above all, he has learned to accept the truth about himself and to face reality instead of either running away from it or making believe it is not there.

The Adult World

The world is conducted primarily by and for adults. Recent emphasis upon childhood and adolescence has made many people forget that about 65 per cent of the population is over twenty and only 35 per cent under. Modern concentration upon infancy, childhood, and adolescence as interesting and important levels of development has sometimes distracted attention from the function of these stages in preparing an individual to live a normal adult life. The increasing need for such preparation may be demonstrated by consideration of the proportional age distribution of the general population, past and present.

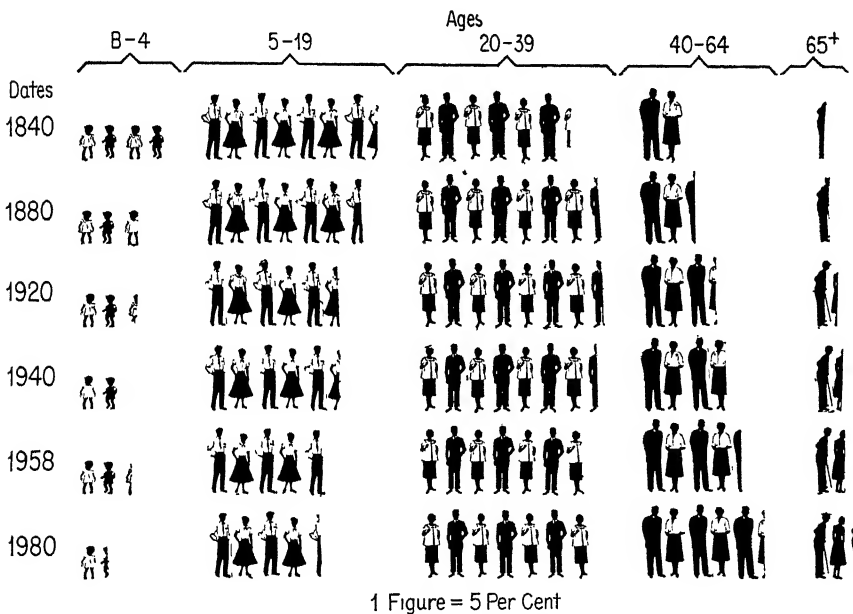


Fig 159 *Age Distribution of Population in the United States 1840-1980*

Based on the U S Census Reports

Census figures have now been collected for approximately a century, although the early results contain data on only a few points. One can, however, trace changes in the proportional distribution of the population by ages. This distribution has been influenced by three main factors: the rate of immigration, the birth rate, and the death rate. Since middle-aged and elderly people leave their homes only in cases of catastrophe, most of the immigrants to America have been young people, often bringing with them babies and young children. During the decades since 1920 immigra-

tion has been restricted to a mere trickle. The birth rate has been falling for the last fifty years, with the exception of a five-year period during and just after each of the world wars. Over the same period the death rate was also falling because of better medical care, better nutrition, better living conditions, and better education. Figure 159 shows the proportion of the population in each in several major age groups in 1840, 1880, 1920, and 1940, together with the probable distribution in 1980. In 1840 the average age of the entire population was sixteen, in 1880 it was twenty, in 1940 it was twenty-seven, by 1980 it will presumably have risen to thirty-one. In 1840 the country was decidedly a young man's country. Only twenty-eight people in a hundred were over thirty years old and not over three in a hundred were over sixty-five. By 1980 it will be a middle-aged man's country, unless present trends reverse themselves. By then, sixty people of a hundred will presumably be over thirty, and twelve over sixty-five, nearly seventy-five in a hundred will be over twenty. In 1840 there was less than one adult for every child or adolescent. Now there are about three for each child, or adolescent. In 1958 there were more people over sixty-five years old than there were babies under two. With every passing decade, therefore, the need for a good adjustment to the adult world becomes more necessary. Adolescence is an interesting and, for most people, an exciting period of existence, but it has to end, even if the college graduates who return for reunions rarely believe this simple truth. As Robert Browning wrote "Grow old along with me! The best is yet to be, the last of life for which the first was made."

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APPENDIX A

List of Books and Films

Novels

The following references have been included because, even though most of the stories are pure fiction, they describe phases of development. The list by no means exhausts the full range of creative literature on the subject. Because they give a more detailed and more lifelike interpretation than the impersonal presentation of a text, novels are useful in connection with the study of adolescence. The instructor is urged to assign as many novels as the students can be expected to read. It is best to ask students to relate what they find in the novels to topics in the course—not to ask them to write a book review. Many students who have little interest in an abstract presentation learn the same principles when these are illustrated, vitalized, and simplified in an interesting narrative. Improperly used, fiction and biography may be misleading, but with reasonable safeguards, they form a valuable adjunct to a systematic text.

The list here presented is long and contains novels of many types. No effort has been made to classify the titles. A few of the books deal directly and almost exclusively with the adolescent period. Others trace the growth of a personality from childhood into the adult years, and still others deal with a single problem which is relevant to some portion of the textbook. From all of these varieties of presentation, a student should be able to find a reasonable number which will make vivid to him some of the more complex aspects of adolescence.

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- Frost, Frances, *Yoke of Stars*, Rinehart, 1939
- Gale, Zona, *Preface to a Life*, Grosset, 1929
- Galsworthy, J., *Dark Flower*, Scribner, 1913
- Gibson, W., *The Cobweb*, Knopf, 1954
- Glasgow, Ellen, *In This Our Life*, Harcourt, 1941.
- Godden, Rumer, *The River*, Little, 1946
- Goldman, Emma, *Living My Life*, Knopf, 1934
- Goodrich, F., and A. Hackett, *The Diary of Anne Frank*, Random House, 1956.
- Green, J., *The Dark Journey*, Harper, 1929
- Gunnarsson, G., *The Night and the Dream*, Bobbs, 1938.
- Hackett, Francis, *Green Lion*, Doubleday, 1936
- Hall, R., *The Well of Loneliness*, Covici, 1932
- Hedden, W. T., *Love Is a Wound*, Crown, 1952.
- Hull, H., *Hawk's Flight*, Coward, 1946
- Hunter, Evan, *The Blackboard Jungle*, Simon and Schuster, 1954.
- Hutchinson, A., *If Winter Comes*, Hodder, 1933
- Hutchinson, R. C., *The Stepmother*, Rinehart, 1955
- Huxley, A., *The Genius and the Goddess*, Harper, 1955.
- James, Henry, *The Ambassadors*, Harper, 1902
- Joyce, James, *A Portrait of the Artist as a Young Man*, Modern Library, 1928.
- Kaufman, Maxine, *I Am Adam*, Knopf, 1956
- Kingsley, C., *Charles Kingsley, His Letters and Memories of His Life*, Macmillan, 1890
- Kramm, Joseph, *The Shrike*, Random House, 1952.
- Lawrence, D. H., *Sons and Lovers*, Viking, 1913
- Lehmann, R., *The Ballad and the Source*, Reynal, 1945.
- Levin, Meyer, *Compulsion*, Simon and Schuster, 1956.
- Lincoln, Victoria, *February Hill*, Rinehart, 1934
- Lowe, F., *Somebody Else's Shoes*, Rinehart, 1948
- McCarthy, Mary, *Groves of Academe*, Harcourt, 1952
- McCullers, Carson, *Member of the Wedding*, in *Ballad of the Sad Café*, Houghton, 1951
- McPartland, J., *No Down Payment*, Simon and Schuster, 1957.

- Mailer, Norman, *The Naked and the Dead*, Rinehart, 1948.
- Mann, Thomas, *Stories of Three Decades*, Knopf, 1936
- Mansfield, K , *The Short Stories of Katherine Mansfield*, Knopf, 1937.
- Marquand, J P , *B F's Daughter*, Little, 1946
- Marsh, E , *Dull the Sharp Edge*, Dutton, 1947
- Martin du Gard, Roger, *The Thibaults*, Viking, 1939
- Matthiessen, F O , *The James Family*, Knopf, 1947.
- Maxwell, W , *The Folded Leaf*, Harper, 1945
- Michener, James, *Fires of Spring*, Random House, 1949, and *Sayonara*, Random House, 1954
- Miller, Arthur, *Death of a Salesman*, Viking, 1949.
- Miller, Nolan, *Why I Am So Beat*, Putnam, 1954
- Mishima, Yukio, *Sound of Waves*, Knopf, 1956
- Moore, George, *Confessions of a Young Man*, Heinemann, 1933.
- Moore, Pamela, *Chocolates for Breakfast*, Rinehart, 1956
- Moravia, A , *Two Adolescents*, Farrar, Straus, 1950
- Motley, W , *Knock on Any Door*, Appleton-Century-Crofts, 1947
- Mumford, Lewis, *Green Memories*, Harcourt, 1947
- O'Neill, E , *Long Day's Journey Into Night*, Yale University Press, 1956.
- Parrish, A , *The Perennial Bachelor*, Grosset, 1929
- Powys, J C , *Wolf Solent*, Jonathan Cape, 1933
- Proust, M , *Remembrance of Things Past*, Random House, 1934.
- Rolland, Romain, *Jean-Christophe*, Holt, 1911
- Salinger, J , *The Catcher in the Rye*, Little, 1951
- Santayana, G , *The Last Puritan*, Scribner, 1936
- Saroyan, W , *Tracy's Tiger*, Doubleday, 1951
- Schweitzer, Albert, *Out of My Life and Thought*, Holt, 1949.
- Shaw, Irwin, *Lucy Crown*, Random House, 1956
- Shedd, M , *Run*, Doubleday, 1956
- Shulman, Irving, *Children of the Dark*, Holt, 1956
- Sinclair, Jo, *The Changelings*, McGraw, 1955
- Steinbeck, J , *East of Eden*, Viking, 1952
- Stern, G B , *The Reasonable Shores*, Macmillan, 1946.
- Stone, Irving, *Lust for Life*, Doubleday, 1954
- Styron, W , *Lie Down in Darkness*, Bobbs, 1951.
- Taylor, Kamala, *Nectar in a Sieve*, Day, 1955
- Thompson, Morton, *Not as a Stranger*, Scribner, 1955.
- Tolstoi, L , *Anna Karenina*, Heritage, 1957
- Undset, Sigrid, *Kristin Lavransdatter*, Knopf, 1935.
- Vidal, G , *The City and the Pillar*, Dutton, 1948
- Walker, M , *Winter Wheat*, Harcourt, 1944
- Ward, M J , *The Snake Pit*, Random House, 1946.
- Waugh, E , *The Loved One*, Little, 1948
- West, Anthony, *Heritage*, Random House, 1955
- West, Jessamyn, *Cress Delahanty*, Harcourt, 1954.
- West, Rebecca, *The Judge*, Hutchinson, 1933
- Wharton, Edith, *The Old Maid*, Appleton-Century-Crofts, 1924.

Williams, T, *The Glass Menagerie*, Random House, 1945
 Willingham, Calder, *End as a Man*, Vanguard, 1947
 Wolfe, Thomas, *Of Time and the River*, Scribner, 1935
 Woolf, Virginia, *Orlando*, Harcourt, 1928
 Wouk, Herman, *Marjorie Morningstar*, Doubleday, 1955
 Zweig, S, *World of Yesterday*, Viking, 1943

Films

When the content of a course is chiefly concerned with the relationships of people, and the problems of individuals, one of the most satisfactory methods of making it vivid to the student is the use of motion-picture films in which the problems and relationships are given extra reality by application to specific situations. Therefore, the list below has been prepared to suggest films which demonstrate many different aspects of adolescence and its related problems.

Since many new films appear each year, and since there is considerable variation in local resources, Section I lists the sources through which the instructor may get up-to-date listings and from which films may be obtained. Several hundred institutions produce films of interest in connection with adolescent psychology, and quite complete lists of them may be obtained through state and government publications.¹ Films listed in Section II are available at the time of the publication of this text, and are suitable for use in connection with the various chapters which discuss similar problems. The list is selective, rather than comprehensive, and the teacher will find in both educational and commercial film libraries many other stimulating films for enriching the comprehension of her students.

SECTION I SOURCES OF INFORMATION AND FILMS

Association Films (YMCA Motion Picture Bureau)

351 Turk Street, San Francisco 2

British Information Service

2516 Pacific Avenue, San Francisco

Educational Film Guide

950 University Avenue, New York 52

Educational Film Library Association

Suite 1000, 1600 Broadway, New York 19

International Film Bureau

57 E. Jackson Boulevard, Chicago 4

Local city, county, and state public health departments

McGraw-Hill Text Films Series

330 W. 32nd Street, New York 36

¹ The most comprehensive source to date is United States Department of Health, Welfare, and Education, *16 MM Film Library Guide, 1956*, available through the U. S. Government Printing Office, Washington 25, D. C.

Metropolitan Life Insurance Company, 1 Madison Avenue, New York 10

National Association for Mental Health, Film Board

13 E 37th Street, New York 16

National Film Board of Canada

630 5th Avenue, New York 20

National Societies for

Crippled Children

Heart Associations

Infantile Paralysis

Mental Hygiene,

and many others, which may be reached through their local offices

Psychological Cinema Register, Pennsylvania State University, University Park, Penn

United Nations Film Division

32nd Street & 1st Avenue, New York 17

United World Free Film Services

350 Battery Street, San Francisco

University extension services almost all universities, and many local and private colleges, have film libraries which are excellent sources for films and for other visual material

World Health Organization Films

See UN Film Division

SECTION II SUGGESTED FILMS FOR USE WITH THIS TEXT

Full identification and addresses of most of these sources may be found in Section I

<i>Title</i>	<i>Comment</i>	<i>Minutes</i>	<i>Date</i>	<i>Source</i>
<i>Age of Turmoil</i>	Early adolescence, with emphasis on emotional problems	20	1957	McGraw-Hill
<i>Angry Boy</i>	Guidance clinic in action with boy who steals because upset	33	1951	Int Film Bur
<i>As Boys Grow</i>	Physical development of adolescent boys	17	1957	Medical Arts Productions
<i>Borderline</i>	Teen-age girl with behavior disturbance Emergency interview	28	1957	McGraw-Hill
<i>Boy with a Knife</i>	Group work with young gangs	19	1957	Int Film Bur
<i>Children's Emotions</i>	Early development, and later growth of emotional patterns	22	1951	McGraw-Hill
<i>Child's Guide to a Parent's Mind</i>	Teen-agers and parent understanding	12	1955	Nat Assoc Mental Health

<i>Title</i>	<i>Comment</i>	<i>Minutes</i>	<i>Date</i>	<i>Source</i>
<i>Conflict</i>	High school and college youths in various typical conflicts	18	1956	McGraw-Hill
<i>Development of Individual Difference</i>	Heredity and environment, in two families	13	1957	McGraw-Hill
<i>Do American Teen-agers Have Too Much Freedom?</i>	Comparison with teen-agers abroad, and discussion	29	1957	Educ Film Guide
<i>Emotional Health</i>	Emphasis on explaining upsets to young people	21	1947	California State Dept Public Health
<i>Face of Youth</i>	Preventive mental health	30	1951	Wisconsin State Board of Health
<i>Feeling of Depression</i>	Jealousy between young boy and older brother	28	1950	Nat Film Bd of Canada
<i>Feeling of Rejection</i>	Problems of independent action for girl feeling rejected	23	1947	Nat Film Bd of Canada
<i>Going Steady</i>	Stages of normal teen-age dating patterns	10	1951	Educ Film Guide
<i>He Acts His Age</i>	Developmental levels to age fifteen	13	1951	Nat Film Bd of Canada
<i>Help before Headlines</i>	Community-supported counseling in action	11	1955	Community Welfare Council, Milwaukee
<i>High Wall</i>	Adolescent boy in problem of prejudice	30	1952	McGraw-Hill
<i>It Takes All Kinds</i>	Teen-agers forming pattern for marriage	20	1950	McGraw-Hill
<i>Make Way for Youth</i>	Community development of a youth program	22	1947	Association Films
<i>Meaning of Adolescence</i>	Difficulties of normal family adjustment, boy and girl	16	1953	McGraw-Hill
<i>Meeting the Needs of Adolescence</i>	Girl 17, boy 14, in physical, mental, emotional growth	19	1953	McGraw-Hill
<i>Outsider</i>	Young girls meeting rejection in school	10	1951	Psych Register
<i>Parents Are People</i>	Problem of authority and teen-age need for independence	15	1955	McGraw-Hill
<i>The Quiet One</i>	Classic on minority youth	67	1950	Nat Assoc Mental Health
<i>Report on Donald</i>	Student with speech problem, and use of therapy.	20	1948	Univ Minnesota

<i>Title</i>	<i>Comment</i>	<i>Minutes</i>	<i>Date</i>	<i>Source</i>
<i>Role Playing in Guidance</i>	Focused for teachers working with school behavior	14	1952	Educ Film Guide
<i>Search</i>	Boy shown as normal but as physically handicapped	26	1951	Nat Soc Crippled Children and Adults
<i>Social-Sex Attitudes in Adolescence</i>	Young couple facing marriage, and their developmental background	22	1953	McGraw-Hill
<i>Social Class in America</i>	Development of three boys from three social levels	16	1957	McGraw-Hill
<i>The Son</i>	Rural boy and the land as factor in his development	28	1951	Nat Film Bd of Canada
<i>The Teens</i>	Normal behavior, three teenagers	26	1957	Nat Film Bd of Canada
<i>Tomorrow Is a Wonderful Day</i>	Rehabilitation of boy from concentration camp	22	1952	Nat Film Bd of Canada
<i>Toward Emotional Maturity</i>	Girl, 18, making decision, and background affecting it	11	1955	McGraw-Hill
<i>Your Body During Adolescence</i>	Nature of changes at puberty	10	1955	McGraw-Hill

A rewarding project to be undertaken by the class in psychology of adolescents is to make an actual film of a few scenes, or write a script depicting the important problems of a particular aspect of adolescence. Simple cameras and good class co-operation can produce some very interesting results. Such a project will encourage independent organization of student thinking about the material the class has been studying.

APPENDIX B

Problems and Projects

It is not expected that any student will be assigned more than one or two of the questions for each chapter. A number have been offered in order that both instructor and student may have a choice.

Chapter 1

THE GOALS OF ADOLESCENCE

- 1 If you can find a family in which each child's height on successive birthdays has been marked on the wall, or otherwise recorded, make a record of the heights and plot a growth curve for each child. Compare the curves thus obtained with the norms.
- 2 Make a collection of nicknames applied to members of the class and their friends. What percentage is based on physical characteristics?
- 3 How many different types of build are recognizable among the members of the class? Discuss briefly.
- 4 Collect from the class members a number of different opinions on the additions or changes which, from their own experience, they feel should be made in Table 1.

Chapter 2

GROWTH IN TISSUE, MUSCLE, AND BONE

- 1 Interview a very tall boy and girl, and a noticeably short boy and girl, and list the advantages and disadvantages of unusual stature which they mention.
- 2 Is there any advantage in the different developmental rate between boys and girls?
- 3 If you know any families that have been in this country for one or two generations, measure those who were born elsewhere and those who were born here, and compare each group with norms for this country for sex and ages represented. Are the children and grandchildren taller and heavier than the parents and grandparents?
- 4 Write a brief account of someone you know who grew very rapidly or very slowly, and how you think that he met the problems presented by his growth rate.

Chapter 3

SKELETAL GROWTH

- 1 List some of the school activities which should be related to the development pattern of the growth in children's hands
- 2 Collect a series of snapshots showing full-length views of any single person from infancy to maturity. What do these reveal about bodily proportions?
- 3 How may skeletal growth affect coordination, and what is its significance for adolescents?

Chapter 4

GROWTH IN STRENGTH AND IN VARIOUS ATHLETIC SKILLS

- 1 Make a chart of appropriate age levels at which the school should introduce five different sports or recreational activities in which physical proportions and strength make a difference in probable success and enjoyment
- 2 What physical education activities would you recommend for the following sixteen-year-olds?
The very late-maturing boy of slight stature
The very late-maturing, large, athletic girl
The very early-maturing but slight and delicately built girl
The tall, slender, slightly built but strong and healthy boy
- 3 Write a brief account of a school acquaintance who, for lack of size or stamina, could not compete in sports and therefore turned his or her energies into other channels
- 4 In a culture which makes relatively few physical demands on either men or women, how do you account for the differences in the importance of athletic ability between boys and girls? Interview at least three boys and three girls on the question, and compare their answers.

Chapter 5

PHYSIOLOGICAL GROWTH

- 1 Ask ten of your classmates of your own sex this question "What was the most difficult problem you had concerning your physical maturation?" Discuss the answers briefly
- 2 What are some classroom problems which may be expected to arise because of the wide range of physiological development in high school freshmen?
- 3 What are some of the techniques that the teacher might use to ease the adjustment of a sexually very precocious girl of twelve, and of a very slowly maturing boy of fifteen?
- 4 Collect information from both the boys and the girls in the class concerning the age at which they first obtained information on the topics listed in Figure 50. At the same time determine the source of the information and compare the results with Figure 52.
5. If a girl, find out at what age each girl in your dormitory, sorority, or room-

ing house began to menstruate Make a chart of the results and compare it with Figure 45

Chapter 6

HEALTH DURING THE ADOLESCENT PERIOD

1 Ask your local office of the state department of public health for current statistics, in your state, on the following

Major causes of death in the total population

Major causes of death in adolescence

Major causes of physical disability in adolescence

Highest and lowest age groups for death from five communicable diseases

2 By getting current statistics from your local office of the public health department, or from other sources available in your state, determine how many lives of fifteen- to nineteen-year-old boys and girls could be saved each year if the death rates of each of the following were to be reduced by one half

Automobile accidents

Tuberculosis

Cancer

Suicide

3 Plan a lecture program for a secondary school hygiene class, using speakers from agencies, in your community, whose services are concerned with the following

Venereal infection problems

Mental and emotional problems

The health of adolescents who leave school early

4 Select a classmate with whom to present alternate sides of a discussion concerning the amount of detailed sex information which it is desirable to give preadolescents Use the chart on page 91

5 If the instructor is willing, have each member of the class list what he or she has eaten during the last twenty-four hours, including whatever has been taken between meals Compare with standards for adequate food intake, obtained from your hygiene or home economics classes

6 What proportion of the members of the class wears glasses? Have each student count the number of students in his largest class who wear glasses, and note the total enrollment List the proportions

Chapter 7

PHYSICAL DEVIATES

1 Write a brief account of the school problems of someone you have known who has a chronic physical handicap

2. If you were teaching a high school sophomore chemistry class which included a boy with a mild cerebral palsy affecting his hands, and a girl with mild, occasional epileptic episodes, what precautions should you take and what opportunities should you offer them?

3 List the resources of your own community for helping adolescents with physical disabilities to achieve productive lives

4 Plan, with another student, a demonstration interview with a parent who is apparently not aware of a physical problem which you have noticed in his adolescent son or daughter

5 Write two brief case studies of chronically sick or crippled people you have known, of whom one seems to you to have made a good adjustment to life, and one a poor adjustment

Chapter 8

MENTAL GROWTH

1 Discuss some of the problems involved in teaching a freshman high school class with this IQ range.

105-115

86-110

78-145

2 Plan a class panel discussion of the problems involved in constructing a secondary school program which would

keep a maximum number of adolescents in school to age eighteen, including IQ's down to 85, or

offer optimum development opportunities to those adolescents with IQ's of 140-190

3 Make a list of the factors important in evaluating the intelligence test results of the following subjects

an adolescent Navajo girl whose parents had just moved to an urban area when she took the test (IQ 81),

the only son of parents who are a doctor and an English teacher (IQ 135),

the youngest of three siblings, whose two older brothers have made brilliant records at the school she attends (IQ 90),

a boy of fifteen from an illiterate home, he has a reading rate which is average for fifth-grade pupils, but normal comprehension for his age, and

an isolated, very bookish girl whose main diversion has always been reading (IQ 115)

4 Ask several people to construct a half dozen items for an intelligence test to be used with high school pupils. What do you think of the results?

5 Figure the IQ's for the following results

MA 6-4 ¹	MA 14-2	MA 8-0	MA 5-1	MA 14-9	MA 13-2
CA 7-1	CA 12-6	CA 8-3	CA 4-1	CA 11-5	CA 12-8

Chapter 9

SPECIAL INTELLECTUAL ABILITIES

1. Discuss the relative merits of

intense, early concentration on special abilities for development of maximum productivity,

¹ These numbers are to be read "6 years 4 months."

encouragement of a very broad foundation for every student, with only slight emphasis on special abilities

2 If you have a collection of things you wrote, drew, painted, or constructed at different ages, make a comparison of them at three or four age levels

3 Do you memorize better, or less efficiently, than you did five years ago? Has your attitude toward memorizing changed?

4 Many children like comics but not cartoons. Can you give an explanation for the preference?

5 If you teach a Sunday school class, or work with a club of younger children, read the children one of the less familiar parables or myths and ask them to interpret its meaning.

Chapter 10

INTELLECTUAL-CULTURAL INTERESTS

1 Take any five interests from the pictures on pages 200–204 and discuss them briefly in relation to the physical, mental, and emotional patterns of development. Can you explain why maximum interest usually appears at the indicated age levels?

2 List the opportunities available in your community to meet the recreational interests of these age groups:

10–13

15–17

19–22

3 Collect from twenty freshmen in your college the name of the book which they currently find the most fascinating, and the area in which they plan to major. From twenty seniors who have completed similar majors, get the name of their current favorite book. Is there any apparent relationship between interest and either age or field of major?

4 Arrange a debate between yourself and a classmate, who will take the opposing side of this issue: the relative dominance of trends toward passivity and trends toward greater participation in leisure-time activities under modern technical and economic conditions

5 What kinds of collections have you made? At what ages?

6 Can you remember some books that made so great an impression upon you that you read and reread and daydreamed about them? What were the books? And how old were you when they had this effect?

7 Keep track of how much time you spend in a week listening to the radio or watching television. Do you keep your radio going while you study? Why?

Chapter 11

INTELLECTUAL DEVIATES

1 Take a small unit of subject matter from a course in your teaching major, and write out assignments for a week of five class sessions for any two of the following pupils.

a poor reader who is skilled at drawing,
a child who is bored by routine, but very bright,
a bright and extremely systematic pupil, and
a child who is rather dull in all courses

2 Arrange a panel discussion of the relative merits of the following methods for making good use of the secondary school time of the brilliant student

“enriched” programs in classes of his own age level,
acceleration to his own intellectual level, irrespective of his chronological age, and

senior-year-as-college-freshman plan

3 Write a brief description of the most brilliant person you know

4 Describe two or three dull individuals whom you have known and who have made a satisfactory adjustment to life, as far as you can observe

5 Hold a debate on this question Should every child be promoted every year, without respect to his mastery of subject matter in the grade he is in?

Chapter 12

NORMAL EMOTIONAL GROWTH

1 What physical and physiological factors contribute to the turbulence of emotional patterns in adolescence? Discuss briefly

2 What amount of emotional expression would be acceptable in
a seventh-grade classroom,
a senior class in high school?

Is there any difference? If so, why?

3 List the situations which have caused you to become angry within the past week or two, and the things you are now afraid of, worried about, or anxious about What proportion of these reactions do you consider childish, adolescent, adult?

4 You have probably been “in love” several times since your infancy How old were you when you were attracted to each person? What was the age and sex of each? Does your history conform to the summary on page 281 or is it different?

5 Rate yourself and your two best friends as very strong, strong, average, weak, very weak, in each of the drives listed in Table 21

6 What have you wanted most for Christmas at different ages? What emotional developments did the changes in desired presents represent to you?

Chapter 13

THE DEVELOPING EGO DANGERS AND ESCAPES

1 Give an instance from your own experience in which you met a problem by repression,
projection, or
attack

2 What elements in modern urban society do you feel contribute to increasing conflicts for adolescents?

3 Under wise guidance, what aspects of frustrating experiences can become positive and useful learning experiences for adolescents?

4 Should an individual enjoy his emotions, or should his goal be their elimination or sublimation? What, in your opinion, are the criteria for such decisions?

5 Describe five recent occasions on which you were "frustrated" What fundamental drive do you think you were expressing? What blocked you? What reaction did you have to the blocking?

6 From novels you have read, or movies you have seen, or people you have known, write a brief history of someone who was blocked in a fundamental drive, but who succeeded in finding satisfaction through some substitute

Chapter 14

PERSONALITY

1 Write from your own experience or special studies

a brief illustrative sketch in which the cultural setting plays an important part in personality development, one in which the individual appeared to develop with very little reference to his cultural surroundings

2 Discuss briefly what you, personally, think that a secondary school teacher can gain from some knowledge of theories of personality development

3 Write a short summary of the theory of personality development that you find most stimulating Why?

4 What precautions should be taken in the administration and evaluation of personality tests, especially when the classroom teacher must be the one to give them?

5 Collect a series of pictures for a TAT type of projective test which would be suitable for testing adolescents from an isolated rural area How might they differ from a standard set, and why?

6 Cut about a hundred geometrical forms out of colored paper, using the types of form shown in Figures 98 and 99 as models Then ask a dozen different friends to arrange them In a few of the cases, what do you think the differences in arrangement might indicate?

7 Show the ink blot in Figure 97 to a number of people and ask them what it makes them think of How many different responses do you get from each? Can you explain any of the differences in content and number of responses? How does this point out the need for clinical evaluations in conjunction with testing procedures?

Chapter 15

EMOTIONAL DEVIATES

1 What have you learned about the nature of emotional problems that points out the difficulties involved in trying to classify them?

2 What do you feel to be the three or four most important issues in preventive mental health programs? Why?

3 Read any of the published diaries of adolescents or a series of published

poems by adolescents What do you find in them that throws some light on adolescent moodiness?

4 You probably have encountered someone who is unduly suspicious of people and situations What purpose do you feel that this suspiciousness serves in this instance? Why?

5 Collect from ten college freshmen and ten college juniors, none of whom have had college courses in psychology, their definitions of "emotionally abnormal" Do these answers indicate any special areas which should be considered in planning an educational program for mental health in the secondary schools?

Chapter 16

NORMAL SOCIAL GROWTH

1 What do you recall as the most urgent social problem of your own early adolescence? What relationship do you feel it bears to your present most urgent social problem?

2 Present a short analysis of the social complexities of a classroom with one of the following characteristics

an exceptionally wide range of economic backgrounds,

an age range of 11-14, both boys and girls, or

an extremely wide range of intellectual abilities

3 How significant, in terms of the personal security of the individual, is the opinion of his peers to an isolated person who is

rather dull normal in intelligence but very anxious about social status,

very bright, and appears to reject friends, or

early maturing and making the most of his relationships with adults?

Explain your answers briefly

4 Describe your own high school crowd What was its relation to other crowds? What were its advantages and disadvantages?

5 Make a list of several people you have known who appeared to be socially isolated What did their environments contribute to their problems, so far as you can estimate? What were their apparent personality characteristics?

Chapter 17

FRIENDSHIP, DATING, AND LEADERSHIP

1 Write a brief account of your own standards for selecting your friends when you were thirteen, fifteen, and seventeen Compare it with a similar account by a classmate of the opposite sex.

2 What do you think the fallacies and the strengths are in the very early practice of "steady" dating in high school? What influences can the schools properly exert?

3 Ask ten randomly selected students on campus for their definition of "a good leader" and present the replies for class discussion.

4 Plan a parent-teacher symposium on social skills for each of the following schools

- a polytechnic high school in an industrial district;
- a junior college business school in the suburbs,
- an urban high school of wide social range, and
- a rural consolidated high school in Alabama

5 List three student leaders whom you have known. What traits or personality characteristics do you think caused them to be leaders?

6 List the traits of the most popular and least popular students whom you know. Compare your list with that given in Table 29

Chapter 18

HOME AND FAMILY

1 With the increasing prevalence of "broken" homes, what can the school offer to help stabilize adolescents with only one parent (who is usually the mother)?

2 Discuss factors in contemporary urban societies which are tending to increase the cohesiveness of families, and decrease the central role of families

3 Classify your own home, and that of your best friend, according to the schemes presented on pages 432 ff and 437 ff. Was your home mother-led, father-dominated, or father-led? Give explicit incidents to support your conclusion

4 Make a list of the specific problems you and your friends have encountered in trying to emancipate yourselves from your homes

5 Give an instance from your own observation of parental maladjustment that has affected the children

Chapter 19

DELINQUENCY

1 Arrange an interview with your local juvenile officer, and report to the class on his opinion of the most pressing problem in juvenile delinquency in your area. What efforts do you think the schools can properly make in helping to solve this problem?

2 Discuss the major factors in delinquency as they might be viewed by any two different personality theorists, as presented in Chapter 14 of this text

3 What would you consider important points to make in an interview with a parent who cannot accept the evidences of delinquency the teacher sees in that parent's adolescent son? The parent states that "none of the other children [in the same home] have had any trouble"

4 What steps could a community take to reduce the amount of delinquency among its children and adolescents?

5 Delinquency has been regarded as
 the result of maladjustment between children and their environment,
 a result of inherited traits within the child,
 the result of the frustration of fundamental drives, and
 the product of unwholesome environments

What point, or points, of view seem to you to be the most tenable?

Chapter 20

GROWTH IN ATTITUDES

1 Discuss the ways in which attitudes exemplified by those who consider themselves members of "The Beat Generation," or "The Lost Generation" of the 1920's, might be regarded as

unresolved adolescent attitudes carried too long, or

mature attitudes based on a different value system from that held by most adults in their generation

2 List the factors in your own community which you think are

decreasing pressures on minority groups,

increasing mutual understanding and tolerance, or

causing areas of intergroup conflicts

To what extent do adolescents participate in these factors?

3 Discuss briefly the changes in evaluation of several "wrong" acts, from ages 11 to 17 Use material presented in the text and draw on your personal experience

4 Make a list of what seem to you to be typical adolescent ideals

5 Rate yourself in your attitude toward other races, nationalities, and religions (Thus, if you are white, American, Protestant, rate your attitude toward Negroes, Japanese, Puerto Ricans, toward Europeans or other nationalities, and toward Jews, Catholics, Moslems) Can you account for your prejudices?

Chapter 21

RELIGIOUS BELIEFS AND MORAL BEHAVIOR

1 From a recollection of your own doubts and questions about religious faith during your adolescence, prepare five questions concerning your present estimate of the real sources of religious uncertainty and get answers to these questions from five each of freshmen, juniors, and seniors in your college Do the results indicate consistent changes in attitude with increasing age? Do they have other implications? What are they?

2 After inquiring of several different church leaders of college religious groups, make lists of the problems most often presented for discussion in their groups How do they differ? What do they have in common?

3 What are some of the particular problems of young adolescents in some of the less "popular" religious groups? How can the school help them? Does your college have any exchange lectures from representatives of foreign religious groups?

4 Hold a debate on the merits and disadvantages of including religious instruction on a compulsory basis in nontheological colleges where adolescents are exploring ethics and ideals from many approaches

5 Write a brief account of your own religious experience to date, and discuss the ways in which you feel it was particularly adequate, or in need of modification, during your adolescence

Chapter 22

COMMUNITY INFLUENCES

1 Compile a list of possible ways in which adolescents could take an active part in the organizations of their communities as an on-the-job training for their responsibilities as mature citizens

2 What do you feel are the most important needs that the community should meet for young people who have to stop formal schooling in their early teens? Why are these needs important?

3. Make a survey of the community resources for extracurricular study extension courses and for the cultural development of young people in your community Are these resources as numerous as the dance halls, movies, bars, and the like, in the same area? Is your community genuinely interested in the welfare of its young people?

4. If there is a trailer camp in your area, interview a teen-ager who is a member of a very mobile family Note his comments on the problems and advantages it presents If there is no trailer camp near you, have a similar interview with an adolescent who has recently moved into your community from a distant state

5 If you have been a member of a community-sponsored program for young people (boys' clubs, teen canteens, and so on), discuss the reasons for your satisfaction or dissatisfaction with the program If possible get from a classmate a comparable statement about his experience in such an organization Do the problems or rewarding experiences indicate some possible trends which might be desirable?

Chapter 23

THE HIGH SCHOOL POPULATION

1 What effects do you think the mobility of population and the politico-economic developments of the last ten years are going to have on the composition of the high school population in the area where you expect to teach? Compare it with your classmates' areas

2 Hold a debate on the merits of the establishment of national scholarships at the secondary school level as a means of keeping competent adolescents in school

3 Arrange a panel discussion on the relative values of establishing technical, practical, and academic high schools to meet the needs of a wide range of student capabilities and interests, or providing very broad educational opportunities in every high school

4 You may have had some friends who have dropped out of school at some time since your freshman year in high school What reasons did they give? Are there other reasons that you think were operative?

5 If the administration of a high school wants to keep every adolescent in school until he graduates, what changes would have to be made in the materials and methods of instruction?

Chapter 24

EMOTIONAL PROBLEMS IN THE CLASSROOM

- 1 From your high school experience, suggest a program for allowing in class democratic expression concerning examinations, without hampering the effectiveness of the study program. How much voice might students be allowed in decisions on the circumstances of their examinations? Why?
- 2 How do you think that teachers might meet the problems of a classroom being disturbed by
 - a very bright boy who is also very aggressive,
 - a general tension over a local minority problem, or
 - the consistent nonparticipation of a small clique?
- 3 Thinking back to your own high school days, indicate how many of the problems listed in Table 51 (pages 579 ff) you had, and which of them remain unsolved for you at the present time
- 4 You may have known at least one pupil in school who seemed to you peculiar, or eccentric. What symptoms of those listed on pages 579 ff did he or she show? What other symptoms were there? What grade were you and the pupil in at the time you made the observations? Do you know what, if anything, was done to help the pupil?
- 5 What part can the school play in protecting a dull child, a minority-group member, and a foreign pupil from being avoided, becoming isolated, and developing undesirable personal traits?

Chapter 25

THE SOCIAL LIFE OF THE SCHOOL

- 1 Since economic and political pressures often necessitate the attempted curtailment of extracurricular programs in schools, write an article for a hypothetical newspaper campaign to justify school participation in supervising clubs, dances, and sports in high school
- 2 Hold a class discussion on the degree to which it is desirable to have teachers participate personally in school activities, such as
 - dances, social clubs, athletic contests,
 - hobbies associated with academic courses, and
 - student government
- 3 Discuss the possible effects on the level of academic achievement of a school system in which every hour was devoted exclusively to study, with no social activity of any kind permitted
- 4 Make a list of the cocurricular activities in either your high school or college. Mark those in which you participated and check your list against that given on pages 605-607. Do you think the range of activities is adequate? What values did you derive from your participation?
- 5 Make a sociogram of a small college class.

Chapter 26

THE HIGH SCHOOL TEACHER

1 If you were hiring teachers for a high school, how much value would you place on trying to choose teachers who were apparently very "average" in personality, and do you, from your own experience, think that the choice of the "average" would eliminate some highly desirable teachers? Why?

2 Review a work of fiction or nonfiction in which the influence of a teacher or a school system is very important. Compare the situation as related in the book with current educational theories concerning a similar problem.

3 Describe briefly the qualifications you would look for if you were employing a high school teacher of

physics,
machine shop,
English, or
art

4 In view of the increasing demands that teachers be highly trained, personally attractive, emotionally well integrated, flexible socially, and sensitive to community needs, what do you think will be necessary in order to obtain such teachers from the systems in which they themselves are now being educated? What about the teachers who developed under the influence of the philosophies of education of the past and who are now teaching? Indicate what positive contributions they may make at present.

5 Write a brief description of the best and the worst teacher you have had to date, and compare your descriptions with Table 55. How many and what characteristics did each teacher show? Do you have any new ones to add to that list?

Chapter 27

PERSONNEL WORK IN THE HIGH SCHOOL

1 Plan a series of discussions for seniors in high school which will meet to some extent each of these interrelated needs for information:

economic opportunities currently available,
academic prospects and techniques of college application;
personality preparedness for meeting the chosen course of action;
choosing a course of action if undecided, and
knowledge of health and social resources outside the school and family.

2 Discuss briefly some of the criteria for a counselor's decision as to whether to manage a student's problem with him herself, or refer him to specialists, when he presents

a personality problem;
a job need,
a reported family conflict; or
an academic planning problem.

3 Write an account of an experience of your own with a counselor, and sug-

gest modifications of the experience which you think would have helped you further

4 If you know a student who is preparing to enter a vocation that seems to you unsuited to his abilities and personality, write a brief description of the student, making clear why you think he will not succeed

5 What vocational ambitions have you had at different ages? Consider the extent to which your present prospective vocation will give you
chances for self-expression,
financial returns, or
security

Next, consider your own needs, using the list given in Table 59 How are your data interrelated?

Chapter 28

THE HIGH SCHOOL CURRICULUM

1 Prepare a chart indicating the trends in scientific and technical fields which are

increasing interdisciplinary cooperation,
increasing specialization

2 How do you think the secondary school might meet the problem of the prospective total elimination of the need for the unskilled worker (by technical advances, automation, and so on), and what curricular changes will it enforce? Why?

3 Debate the value of the various theoretical bases discussed on pages 662-667 How important do you consider each?

4 Hold a debate on this topic The present high school curriculum is better than that in vogue in 1915 (For an idea of the curriculum in 1915, see Table 60)

5 During the eight years of high school and college, what proportion of the work do you think should be elective? Why? Justify your answer

Chapter 29

THE END OF ADOLESCENCE

1 Write a brief critique of this text, with regard to the presentation of the goals of maturity

2 When there are major conflicts in a society and the adolescent challenges the teacher's definition of maturity, what are some of the constructive approaches the teacher can take to the challenge?

3 Write a brief case history of your own development through adolescence and give the areas in which you feel you have achieved the least, and the most, maturity

4 Hold a class discussion on the problems in establishing an adequate definition of "good" adult behavior

5 Do you actually know when anyone is "mature," or is this a lifelong development? Defend your conclusion

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